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IDENTIFIERS	*Shippensburg University PA

ABSTRACT

This guidebook, a resource for both college academic advisers and advisees, is designed to assist the undeclared student attending Shippensburg University of Pennsylvania in the decision making process of selecting a major area of study with attention to the question: How do I want to live my life? The guidebook first presents an overview of the Division of Undeclared Majors at the university. The next two adviser-oriented chapters discuss what academic advising entails and provide tips on how to make the advisement process more effective. These are followed by two student-oriented chapters on how to manage time and effective strategies and tactics for career planning. The guidebook next presents the school's academic policies and procedures, followed by a description of campus resources for student financial aid, career development, information sources, learning assistance, and counseling. The labor marketplace for the 1990s is reviewed next, highlighting the most promising careers. Finally, the guidebook lists the university's undergraduate programs, discusses the general education program, and then lists the general requirements and elective courses for each of the school's colleges: Arts and Sciences; Business; and Education and Human Services. An appendix lists the academic faculty and administration. Contains a 34-item bibliography and an index. (GLR)

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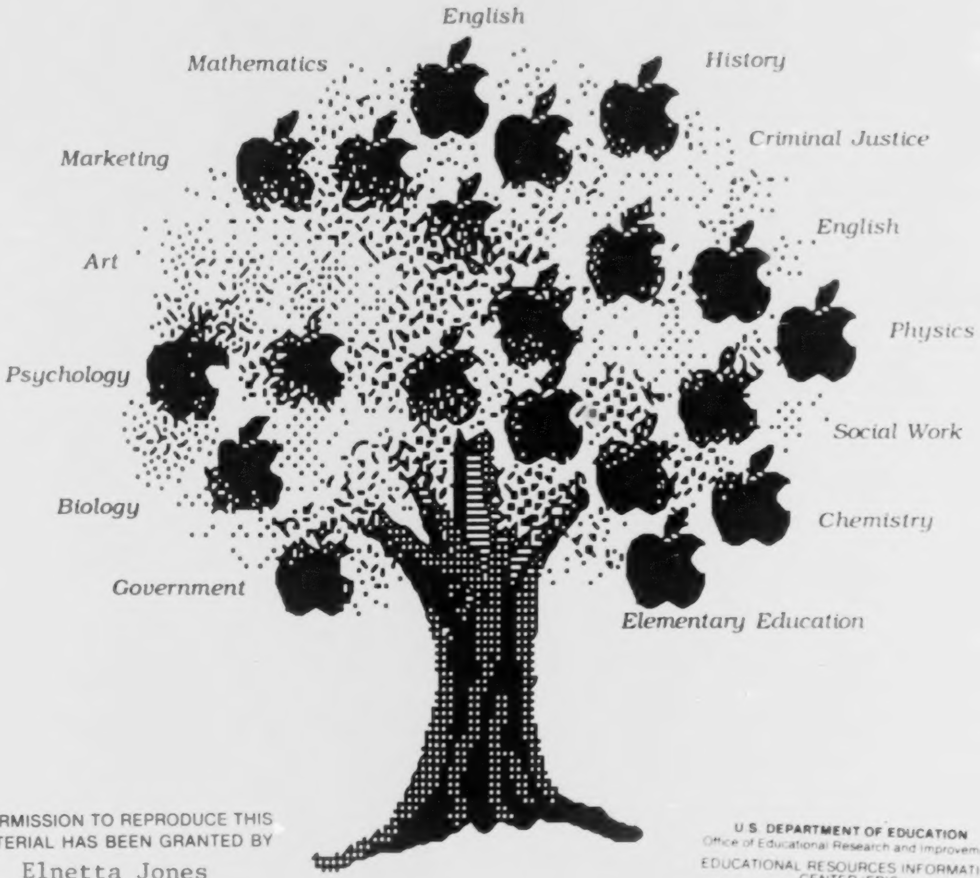
1991-1992

GUIDEBOOK FOR ADVISING UNDECLARED MAJORS

ED 335 985



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Division of Undeclared Majors

Shippensburg University

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Division of
Undeclared Majors

Academic Calendar

1991-92

August 24	■	New freshmen arrive
August 26	■	Last day for placement tests before classes begin (Evening classes begin)
August 27	■	Schedule adjustment begins
August 28	■	Day classes begin
August 30	■	Schedule adjustment ends (last day to add or drop a class)
September 2	■	Labor Day
October 1	■	Last day to withdraw from a class with a "W" grade
November 26	■	Thanksgiving break
December 2	■	Classes resume
December 6	■	Classes end
December 9 - 13	■	Final exams
December 14	■	Commencement
January 11	■	New freshmen arrive
January 15	■	Schedule adjustment
January 16	■	Semester II day & evening classes begin
March 7	■	Spring Break
March 16	■	Classes resume
April 16	■	Easter Break
April 20	■	Evening classes resume
April 21	■	Day classes resume
May 1	■	Classes end
May 4 - 8	■	Final Exams
May 9	■	Commencement

TERM III

May 18	Session Opens
May 25	Memorial Day-SU closed
May 30	Make-up day
June 5	Session ends

TERM IV

June 8	Session Opens
July 3	Independence Day-SU closed
July 9	Session Ends

TERM V

July 13	Session Opens
August 13	Session Ends

1991-1992

GUIDEBOOK FOR ADVISING UNDECLARED MAJORS

Dr. Elnetta G. Jones
Dean
Division of Undeclared Majors

Ms. Marian B. Schultz
Assistant Dean

Ms. Terry A. Monismith
Secretary

...the tree of knowledge in your garden grows

Oliver Wendell Holmes

Shippensburg University
Shippensburg, Pennsylvania

Shippensburg
University

A member of Pennsylvania's
State System of Higher Education

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Division of Undeclared Majors
Shippensburg, PA 17257

WHAT'S NEW in the 1991-92 edition of the Guidebook for Advising Undeclared Majors

Undergraduate Degree Programs: Tips on Advising for Each Major

Academic Advising: Tips for Multicultural Advising

Strategies and Tactics for Effective Career Planning

The Marketplace in the 1990's
Information about PA

Requirements for Transferring to a Major: New Format

Students ARE:

...the most important people on the campus. Without students there would be no need for the institution.

...not cold enrollment statistics but flesh and blood human beings with feelings and emotions like our own.

...not people to be tolerated so that we can do our thing. They are our thing.

...not dependent on us. Rather, we are dependent on them.

...not an interruption of our work, but the purpose of it. We are not doing them a favor by serving them. They are doing us a favor by giving us the opportunity to do so.

ACT National Center for the Advancement of Educational Practices

ACKNOWLEDGEMENTS

The Guidebook is published as a resource for both advisors and advisees. It is selective rather than comprehensive and is intended to be used in conjunction with the undergraduate catalog and the student handbook.

We extend our gratitude to Drs. Beverly Butler and Betty Lu Morgan who were responsible for editing, clarifying many points, and making the guidebook more readable. We also extend our thanks to the departmental chairpersons who provided current course requirements for the undergraduate majors. And, to Drs. Julia Yang and Hugh Aberman for assisting us in revising the Career Exploration and Planning Seminar.

Dr. Elnetta G. Jones
Ms. Marian B. Schultz
Ms. Terry A. Monismith

Division of Undeclared Majors

Shippensburg
University

July, 1991

Dear Advisor:

The 1991 revised edition of the Guidebook for Advising Undeclared Majors has been developed as a resource for you and your advisees. It has been designed to serve as a quick reference for useful and pertinent information.

You are encouraged to read your new guidebook very carefully, to refer to it often, and to use it as you assist your advisees. Please use the guidebook in conjunction with other printed material.

Through your personal efforts and these resources, your advisees can be helped to grow and learn in their academic environment. Thank you for your generous expenditure of time and effort in this special role.

Sincerely,

Dr. Elnetta G. Jones
Dean
Division of Undeclared Majors

Shippensburg, PA 17257 717-532-1395
A member of Pennsylvania's State System of Higher Education

Division of Undeclared Majors

Shippensburg
University

July, 1991

Dear Student:

The 1991 edition of the Guidebook for Advising Undeclared Majors has been developed as a resource for you. It is designed to serve as a quick reference for useful and pertinent information. In it you will find the answers to many of your questions. You are encouraged to read your new guidebook very carefully and refer to it often during your advising sessions.

We are delighted to have you enrolled as an undeclared student, and my staff and I are available to assist you as you begin your college career. Best wishes for a successful year.

Sincerely,

Elnetta G. Jones

Dr. Elnetta Griffin Jones
Dean
Division of Undeclared Majors

Shippensburg, PA 17257 717-532-1395
A member of Pennsylvania's State System of Higher Education

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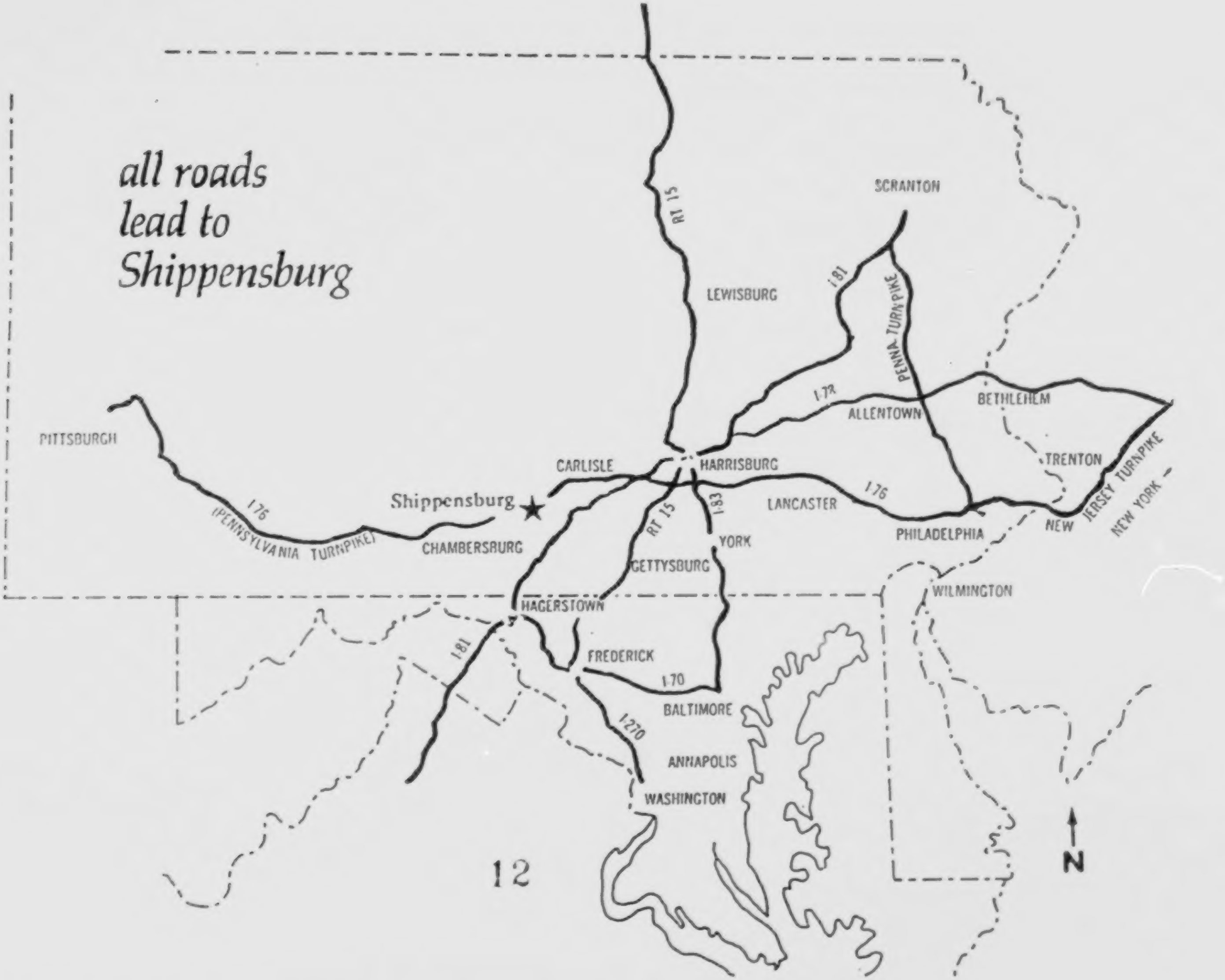
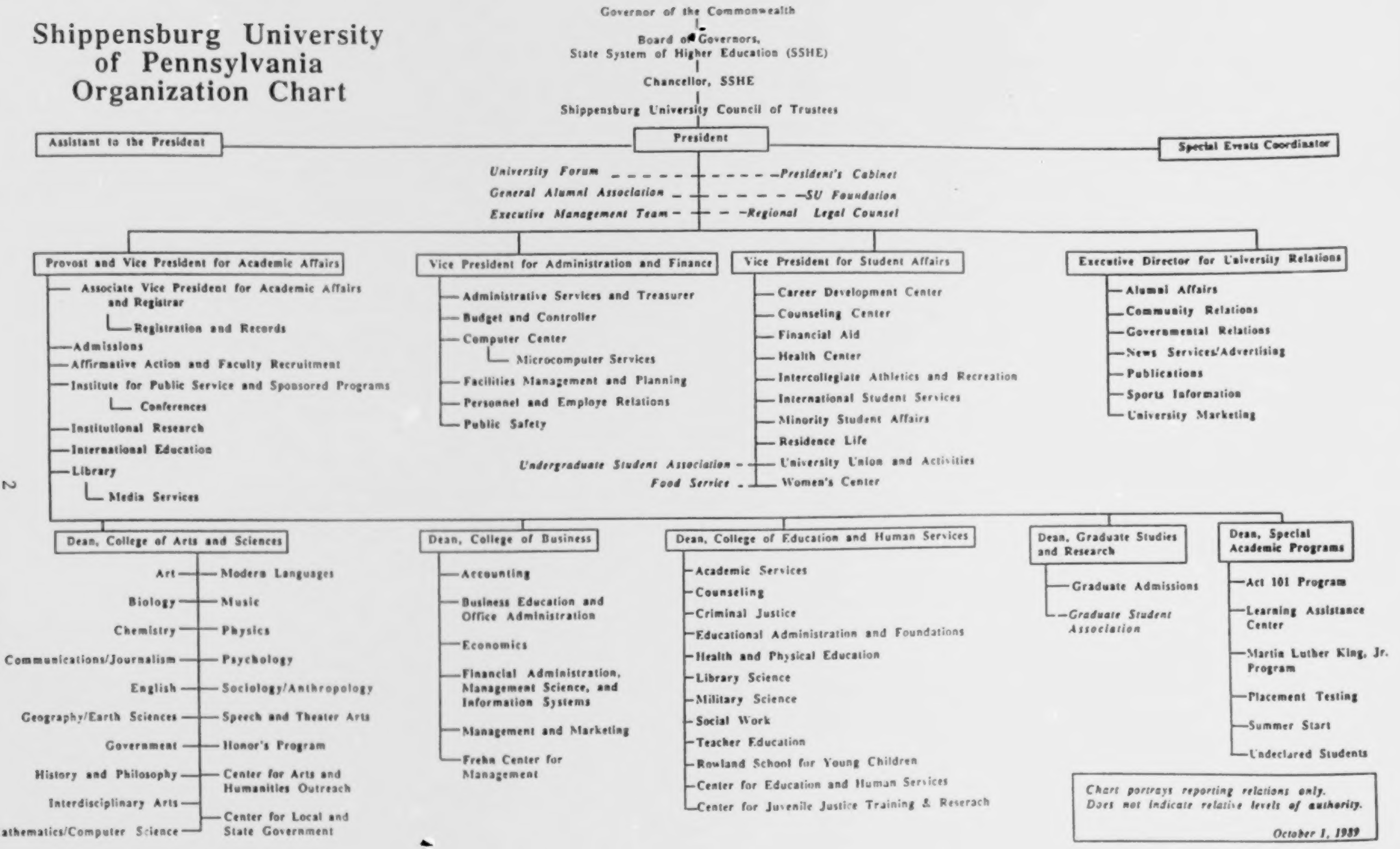
all roads lead to Shippensburg



Shippensburg University of Pennsylvania is situated adjacent to the borough of Shippensburg (population 6,500), in the heart of the picturesque Cumberland Valley, 40 miles southwest of Harrisburg. It is one of the fourteen colleges in the state system of higher education. The University is a public liberal arts institution with a student population of 6,594: in 1990-91, there were 5,528 undergraduate students and 1,066 graduate students. Forty-one percent of the undergraduate students were enrolled in the academic programs in the *College of Arts and Sciences*, twenty-five percent in the *College of Business*, twenty percent in the *College of Education and Human Services*, and thirteen percent in the *Division of Undeclared Majors*.

Founded in 1871, Shippensburg University has earned a reputation for quality education. It is one of only ten Pennsylvania colleges to have its undergraduate business programs accredited by the *American Assembly of Collegiate Schools of Business*, and one of only 22 of Pennsylvania's 130-some colleges to earn accreditation by the *National Council for the Accreditation of Teacher Education*. Of the University's 322-plus full-time faculty, three out of every four hold a doctorate or the highest terminal degree in their academic field, and many of the others are Ph.D. candidates. Although this is a teaching faculty, virtually all professors are engaged in research, consultation, community services, and/or participation in professional associations.

Shippensburg University of Pennsylvania Organization Chart



- Governor of the Commonwealth
- Board of Governors, State System of Higher Education (SSHE)
- Chancellor, SSHE
- Shippensburg University Council of Trustees
- **President**
  - Assistant to the President
  - Special Events Coordinator
  - *University Forum*
  - *General Alumni Association*
  - *Executive Management Team*
  - *President's Cabinet*
  - *SU Foundation*
  - *Regional Legal Counsel*

Provost and Vice President for Academic Affairs

- Associate Vice President for Academic Affairs and Registrar
  - Registration and Records
- Admissions
- Affirmative Action and Faculty Recruitment
- Institute for Public Service and Sponsored Programs
  - Conferences
- Institutional Research
- International Education
- Library
  - Media Services

Vice President for Administration and Finance

- Administrative Services and Treasurer
- Budget and Controller
- Computer Center
  - Microcomputer Services
- Facilities Management and Planning
- Personnel and Employe Relations
- Public Safety

Vice President for Student Affairs

- Career Development Center
- Counseling Center
- Financial Aid
- Health Center
- Intercollegiate Athletics and Recreation
- International Student Services
- Minority Student Affairs
- Residence Life
- University Union and Activities
- Women's Center
- *Undergraduate Student Association*
- *Food Service*

Executive Director for University Relations

- Alumni Affairs
- Community Relations
- Governmental Relations
- News Services/Advertising
- Publications
- Sports Information
- University Marketing

Dean, College of Arts and Sciences

- Art
- Biology
- Chemistry
- Communications/Journalism
- English
- Geography/Earth Sciences
- Government
- History and Philosophy
- Interdisciplinary Arts
- athematics/Computer Science
- Modern Languages
- Music
- Physics
- Psychology
- Sociology/Anthropology
- Speech and Theater Arts
- Honor's Program
- Center for Arts and Humanities Outreach
- Center for Local and State Government

Dean, College of Business

- Accounting
- Business Education and Office Administration
- Economics
- Financial Administration, Management Science, and Information Systems
- Management and Marketing
- Frehn Center for Management

Dean, College of Education and Human Services

- Academic Services
- Counseling
- Criminal Justice
- Educational Administration and Foundations
- Health and Physical Education
- Library Science
- Military Science
- Social Work
- Teacher Education
- Rowland School for Young Children
- Center for Education and Human Services
- Center for Juvenile Justice Training & Reserach

Dean, Graduate Studies and Research

- Graduate Admissions
- *Graduate Student Association*

Dean, Special Academic Programs

- Act 101 Program
- Learning Assistance Center
- Martin Luther King, Jr. Program
- Placement Testing
- Summer Start
- Undeclared Students

Chart portrays reporting relations only.
Does not indicate relative levels of authority.

October 1, 1989

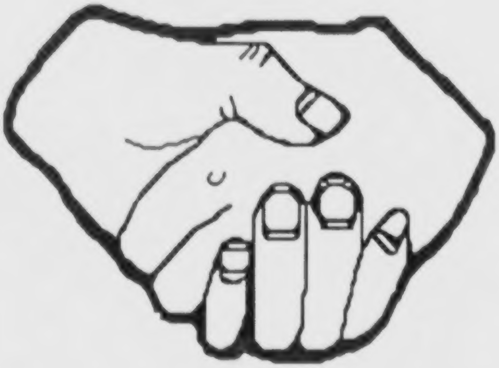
OVERVIEW OF THE DIVISION OF UNDECLARED MAJORS

It is not uncommon for students entering college to be unsure about their academic or career goals. Vocational immaturity, lack of career information, demand for majors with highly competitive standards, as well as demand for majors with limited enrollments are cited as reasons for student indecision (Noel, Levitz, Saluri, and Associates, 1985).

As many as 22-50 percent of the freshmen entering college nationally are undecided about their major field of study (Gordon, 1985). At Shippensburg University, a comparable number of entering freshmen are undecided. Not all students who are uncertain about their majors are officially designated as undeclared majors. At Shippensburg University, approximately 57 percent of our graduating students have changed their majors at least once (Persister Study, 1991). Nationwide, close to 75 percent change their majors at least once (Noel, Levitz, Saluri, and Associates, 1985).

There are many definitions of undeclared. There are students who have no idea what they want to pursue in college as they have no academic or career goals. Others may have a multiplicity of interests, and for that reason, are reluctant to select one particular academic or career goal. Still others have some idea what they want to major in, but first want to test their interests and explore new fields. There are students who have a definite major in mind, but do not meet existing and highly competitive admission standards for that field.

The Division enrolls all students who have not chosen a major. Freshmen are identified as "undeclared" through the admission application. Students must remain undeclared for at least one semester. However, they must declare a major by the end of the fourth semester.



Academic Advising

...when you can, always advise people to do what you see they really want to do, so long as what they want to do isn't dangerously unlawful, stupidly unsocial or obviously impossible. Doing what they want to do, they may succeed; doing what they don't want to do, they won't

James Gould Cozzens

OVERVIEW

ACADEMIC ADVISING

The Academic Advising Program is the critical link in delivery services to undeclared students. It is coordinated by the Division of Undeclared Majors staff. The advisors are volunteers from the twenty-five (25) undergraduate degree academic departments and the central administration of the University.

Even though most faculty advisors have added to their advisee load by becoming advisors in the Division of Undeclared Majors (and with no additional compensation), there is no difficulty in getting faculty participation.

All advisors are oriented to their special role through a three-stage program which features: 1) the role of the Division of Undeclared Majors in the University and an overview of the delivery services; 2) objectives of the advising program; 3) advising strategies and information regarding the undecided college student; 4) a 50-minute videotape on academic advising situations--featuring simulations on typical advising situations to provide focus on critical evaluation of the advising process and to communicate effective advising skills; and 5) strategies for assisting students in selecting General Education courses based on their skills, abilities, and interests. The training program is conducted in three four-hour sessions and is held prior to the beginning of the fall semester.

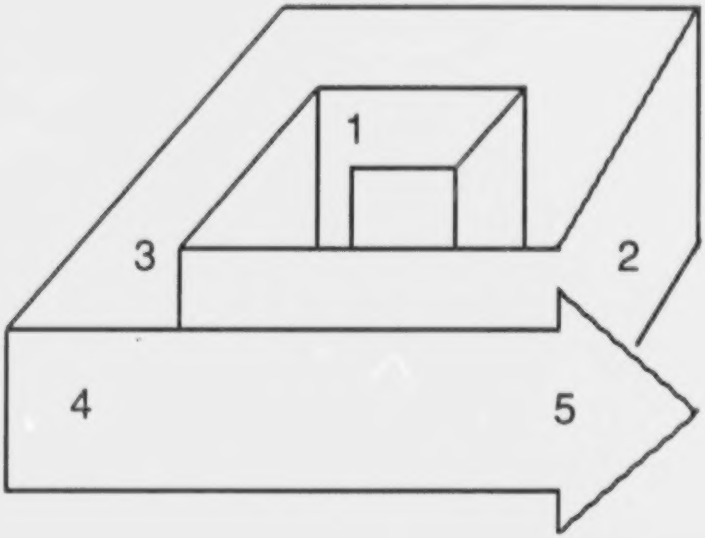
According to research, academic advising facilitates student development. It is the philosophy of the University that good academic advising enhances the retention and satisfaction of undeclared students. When one considers the range of opportunities open to the student, the influence of the academic advisor becomes quite clear. There are many students who fail to reach their full potential and while this may not be entirely the fault of the academic advisor, it is suggested that through the advisor's special, unique, and personal efforts, students can be helped to grow and learn in an academic environment (Kafka, 1974).

The purpose of academic advising is to help the student to determine the important goals and directions necessary as a basis for the decision-making process, not only at the beginning of freshman year college experiences, but throughout a college career. Academic advising is equated with a particular philosophy of life. The axiom states, "I can give you a fish and you will eat for a day--I can teach you to fish and you'll eat for a lifetime." Hence, academic advising is a central and important activity in the process of education (Kafka, 1974).

According to Terry O'Banion (Crockett, 1980), the process of academic advising includes five dimensions. These are: 1) exploration of life goals; 2) exploration of career/educational goals; 3) selection of educational program; 4) selection of courses; and 5) scheduling of classes. The University should provide the student with a variety of experiences in each dimension. Ideally, the experiences would occur in a sequential order as indicated. The college or university that is dedicated to helping students achieve their total potential will provide students with an advising support system that can help them focus on the question, "How do I want to live my life?" Few students have had opportunities to explore this question in an intrusive and meaningful way. College should be an experience especially designed for such exploration. Without such exploration, a student would not be able to decide how to use his/her skills and interests in a vocation.

THE ADVISING PROCESS

1. EXPLORATION OF LIFE GOALS
2. EXPLORATION OF CAREER/EDUCATIONAL GOALS
3. SELECTION OF EDUCATIONAL PROGRAM
4. SELECTION OF COURSES
5. SCHEDULING OF CLASSES



-O'Banion

PROCESS OF DEVELOPMENTAL ADVISING

1. **EXPLORING LIFE GOALS**
    - (a) Know student characteristics and development
    - (b) Understanding decision-making process
    - (c) Know principles of psychology and sociology
    - (d) Possess skill in counseling techniques
    - (e) Appreciate individual differences
    - (f) Believe in worth and dignity of all people
    - (g) Believe that all people have potential

2. **EXPLORING CAREER GOALS**
    - (a) Know vocational fields
    - (b) Possess skill in test interpretation
    - (c) Understand the changing nature of work in society
    - (d) Accept all fields of work as worthy and dignified

3. **CHOOSING PROGRAMS**
    - (a) Know programs available in the college
    - (b) Know requirements of programs (special entrance requirements, fees time commitments, etc.)
    - (c) Know university requirements for transfer programs
    - (d) Know how others have performed in the programs
    - (e) Know the success of program graduates

4 **SELECTING COURSES**
- (a) Know available courses
- (b) Know special information about courses (prerequisites, etc)
- (c) Know rules and regulations of the college
- (d) Know honors and developmental courses
- (e) Know instructors and their teaching styles
- (f) Know course content
- (g) Know advisee's demonstrated abilities

5. **SCHEDULING COURSES**
    - (a) Know course schedule
    - (b) Know all registration procedures
    - (c) Know advisee's work and commuting schedules

Source: Noel L. and Levitz, R. (1989). *Managing Retention Through Early Intervention.* (Adapted from T. O'Banion Developmental Advising Model). Iowa: Noel Levitz Centers for Institutional Effectiveness and Innovation, Inc. p. 20.

TIPS FOR
EFFECTIVE ADVISEMENT

Advisors of undecided students have the special challenge of getting their students to broaden their horizons by taking a wide variety of courses and to channel their interests into a more defined area. The following suggestions are directed to students. You may find some of them helpful in getting students to look at the same old question of "What's the best major for me?"

1. First, get to know the majors that are open to you. You may be familiar with English, History, Chemistry or Math, but do you have any real idea what Anthropology, Geography, or Classics are all about? Before you choose a major, read catalog descriptions and then talk to faculty in those departments.

2. Get first-hand experience. Experiment with different courses before making decisions. A note of caution: don't limit yourself to beginning level courses that exist primarily to fulfill General Education requirements. They're sometimes too broad in score to give you an accurate picture of the major.

3. Evaluate what you've learned to date. What courses have you liked best? Least? Why? How do the majors you're considering relate to your interests, abilities, and values?

4. Evaluate the majors you're considering. You're close to making your choice. The following checklist can help you confirm or reassess your decision.

5. Do you know:

   a. What preparatory courses are required?
   b. What's the minimum grade point average for acceptance into the major?
   c. How many courses in the major are required?
   d. Whether the course offerings are sequential or non-sequential?
   e. If the exams are finite reasoning or essay?
   f. How much freedom there is for elective courses?
   g. How many credits are needed in order to graduate in that major?
   h. Who the departmental advisor is?

Source: ______ (1988, September). An action plan for the undecided student. The Academic Advising News (NACADA).

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As advisors, we are frequently in a position to aid students in their decision-making process. This can be one of the most satisfying aspects of our profession, yet too often proves to be one of the most frustrating. "What courses should I take?" and "What's a good major?" are questions we hear all the time that reflect real and important issues to students; however, advisors don't want to fall into the trap of "telling" when we should be guiding students to make their own informed, well thought-out decisions. To get students "on track", here are some considerations:

- Is the student experiencing "blocks" to decision making, such as poor self-esteem, option blindness, wishful thinking, or time pressure distortion and panic?
- Can the student list priorities relating to the decision?
- Has the student taken any active steps toward making the decision? Does he or she need outside help to do so?

Here are four steps to decision-making that some students find helpful:

1. List all options, choices, and possibilities, carefully observing your thoughts and feelings about each.
2. Designate one choice by coming to a conclusion--and discard all other options. Consciously register this decision.
3. Fully commit to it.
4. Translate your decision into optimistic action.

Remember that for a decision to succeed, a student needs acknowledged priorities, realistic goals and expectations, self-confidence and commitment. As advisors we can help students deal realistically with both their strengths and weaknesses. Students who make a free committed choice about something of concern to them can greatly increase their self-esteem, thereby increasing their decision-making power.

Source: Jeffery, P.W. (1987, September). Helping students make decisions. The Academic Advising News (NACADA), p. 6.

TIPS FOR MULTICULTURAL ADVISING

When advising students of different ethnic backgrounds, extra sensitivity is required for effective advising and positive outcomes. The following are some techniques that have been successfully implemented in advising sessions:

1. It is best to adhere strictly to the "rules" of the appointment--treat all students consistently and with respect. Process according to the regulations and do not accept excuses; for example, late arrival or failure to show up for appointments, spending too much time with any particular student group, etc. Otherwise, you and the college will be viewed favoring a certain ethnic group and thus discriminating against others. This is a reputation you cannot afford to have.

2. Approach the use of a foreign language with caution--encourage students to communicate in English first, as a counseling session is yet another chance to practice. Resort to a foreign language only if it becomes difficult to understand due to the limitation of students' ability to speak.

3. Avoid certain types of questions starting with "why"--questions such as "Why did you come to this country?" and "Why are you not working?". These may be too direct and can offend students. If you need to have information, work around this problem by asking the questions such as, "What do you want to do?" and "What are you doing now?"

4. If you have to give bad news, have a straightforward talk. If you try to minimize the impact with sympathy, this can backfire on you. First explain how the system works, and then help students to understand exactly what they have to do to reach their desired goals.

5. Remember your position as a role model--whether you like it or not, you will be viewed as one. With that in mind, the sensitive advisor will deal with students thoughtfully and respectfully no matter what their gender, age, or ethnic background.

Source: Kelts, K.W. (1991, February). The Academic Advising News (NACADA), pp. 1-6.

CHARACTERISTICS OF A GOOD ADVISOR

1. DEMONSTRATES CONCERN FOR EACH ADVISEE. The ideal relationship is both non-judgmental and non-threatening on the one hand while capitalizing on the authoritativeness of the advisor. Although this balance is difficult to maintain, it can best be accomplished by demonstrating interest and helpful intent. Respect for the student and concern for his or her welfare is paramount.

2. IS AVAILABLE AND ACCESSIBLE. Post and keep office hours and make certain that advisees know them. If possible, encourage advisees to "drop by" to let you know what their progress or concerns are. You might also seek out advisees in a variety of informal campus settings.

3. TAKES THE INITIATIVE FOR CONTACT. Students, particularly freshmen, are hesitant to make initial contact. The advisor who waits for the student to initiate contact will soon discover that contacts are few. Call the advisee, stop to chat on campus, or drop the advisee a note of invitation.

4. IS A GOOD LISTENER. The most immediate impulse of the conscientious, concerned advisor is to solve the student's problem by making the decision and directing an outcome. In many cases, however, the student's most pressing need is finding a good listener. Most of the time solutions to problems become obvious as the advisee talks. An advisor who is an attentive listener often discovers that the advisee can solve his or her own problems. Quality listening will also allow the advisor to gain greater insights into the student's problems.

5. IS REALISTIC. Discover and assess the advisees' self-expectations in relation to others. Give the advisee a realistic appraisal of how he or she compares to others and what performance levels can reasonably be expected.

6. MAKES REFERRALS TO OTHERS. Good referral skills are essential in the advisor-advisee relationship. Advisors should 1) be totally at ease with making a referral; 2) give the student an understanding of why the referral is being made; 3) be knowledgeable of services provided by the referral agent; and 4) help the student make an appointment with the referral agent.

7. PROVIDES ACCURATE INFORMATION. Accurate information is the cornerstone of quality advising. Advisors must assist students in understanding programs, policies and procedures and should acquaint advisees with the catalog, advising handbook, planning worksheets, etc.

8. KEEPS GOOD RECORDS. After an advisee conference, note the content of the discussion with particular attention paid to problems, proposals, or referrals. In preparation for an advising conference, review notes of previous contacts.

9. CELEBRATES SUCCESS. Students deserve encouragement for their achievements. Oddly, they seldom get it since achievements are quite relative. Let your advisee know you value his or her efforts and success relative to abilities.

Source: The ACT National Center for the Advancement of Educational Practices (1989). The Status and Future of Academic Advising: Problems and Promise, (W.R. Habley, Ed.). Iowa City, Iowa: p. 166-167.

REFERRAL SKILLS

HOW TO REFER STUDENTS

1. Referral decisions--ability to determine whether a referral should be made.
    - A. Determination of problem(s).
    - B. Determination of whether or not you can help and/or are qualified to offer the assistance needed.
    - C. Determination of possible agencies or persons to whom the student may be referred.

2. Referral process--ability to professionally refer the student to the proper person or agency for help.
    - A. Explain in a clear and open manner why you feel it's desirable or necessary to refer.
        1. Take into account the student's emotional and psychological reaction to the referral.
        2. Get the student to discuss his/her problem(s), consider reasons for referral, evaluate possible sources of help, and assist in the selection of the specific person or agency.
    - B. Explain fully the services which can be obtained from the resource person or agency you are recommending.
    - C. Reassure student about capability and qualifications of resource to help meet the particular need expressed.
    - D. Attempt to personalize the experience by giving the student the name of a contact person to ask for or help by calling for an appointment for the student. Give directions to the office if necessary.
    - E. Discuss with the student any need for transfer of data and obtain consent and approval for the transfer.
    - F. Assist the student in formulating questions to ask or approaches to take.
    - G. Transmit to the person or agency who will assist the student all the information essential for helping the student.

3. Follow up--ability to evaluate the appropriateness and effectiveness of the referral.
    - A. Determine if the student kept his/her appointment.
    - B. Discuss with the student his/her evaluation of the help received from the agency or person.
    - C. Determine whether you selected the appropriate source of help for the student.

Source: Crockett. D. Advising Skills, Techniques, and Resources, pp. 759.

25

Advisor-Initiated Contacts

Fall Semester

Minimum Advisee Contacts

August

-Informal get-acquainted session (arranged through Dean's office)

September

- Individual meetings with advisees to discuss adjustment problems if any; class schedule; time planning; use of resources, etc.

Mid-October

-Mid-term grades
-Help advisees plan courses for spring semester
-Learning skills resources, if needed
-Career assessment (refer to Dean's office)
-Make referrals

November

-Discuss academic progress and course load
-Plan final courses for spring semester
-Sign advisees schedule

Spring Semester

Minimum Advisee Contacts

Mid-January

-Discuss advisee academic performance for Semester I
-Scheduling; encourage advisees to repeat "F" grades

Late February

-Mid-term grades
-Refer students with failing grades to the Learning Assistance Center.
-Career interests

March

-Courses for the fall semester or summer school
-Make referrals as necessary

April

-Help advisees plan final schedule for the summer sessions and/ or the fall semester. Discuss other courses.

REPEATING COURSES

According to university policy, a student *may only repeat three courses* (the same course or different courses) without the inclusion of the prior grade in the calculation. In short, after the third repeat, any repeated course will be computed in the GPA as a new course.

EARLY ALERT WARNING SYSTEM FOR FRESHMEN

PURPOSE: To identify students in academic difficulty with "D" and "F" grades at mid-term.

-Notification

-Follow-up with appropriate resources

Counseling
Learning Assistance
Center
Other referrals

ADVISING THE STUDENT WHO IS ON ACADEMIC PROBATION

Many faculty who work with students on academic probation find that those who are later dismissed for poor academic performance often make common errors in judgement. If those students had made different decisions while on academic probation, they might have stayed in college. The following are common mistakes that these students often make:

AVOID REPEATING COURSES IN WHICH THEY EARN "F" GRADES

Students tend to put off repeating "F"grades until the summer session. If the student's grades are poor in the second semester, the opportunity to attend summer school may not be available to them. Because of this, the student should repeat courses as soon as possible. For example, if a student gets an "F"in a course Semester I, the course should be repeat in Semester II. Please be aware that under university policy a student may only repeat three courses (the same course or different courses) without the inclusion of the prior grade in the calculation. In short, after the third repeat, any repeated courses will be computed in the grade point average as a new course.

TAKE COURSES ON THE ADVICE OF A FRIEND

Students often are "advised" by friends to take courses simply because someone else found these courses met certain needs. Friends, although with good intentions, may misadvise their peers about courses that are easy and appropriate for some, but difficult and inappropriate for others. Thus, the probationary student should place only limited faith in the course selections of friends.

SEEK ACADEMIC OR PERSONAL HELP LATE IN THE SEMESTER

Some students try to succeed on their own and seek help only when it is too late. Students often fall prey to the myth of self-reliance. They believe that if they are not totally independent they are somehow "unfit" or "unqualified" for higher education. Such an assumption is neither true nor necessary. Students need to know about resources available on campus and they need to be assured that using support services is expected and encouraged as part of the total academic experience.

ENROLL FOR TOO MANY CREDITS

Students think they can "get it all back" through one heroic try and, thus, attempt to make the entire grade point average improve in a single semester. Students on probation should take fewer credit hours, not more. Students who attempt to make a quantum leap in their grade point average in one semester usually perform poorly because of the multiplying effects of more quizzes, papers, tests, class hours, etc. Twelve credit hours should be the maximum for students on academic probation. A student who earns more average grades makes less grade point average improvement than the student who earns fewer, but higher grades.

ATTEMPT TO DROP A COURSE AFTER THE DEADLINE FOR WITHDRAWALS

Students believe they will receive special consideration because of their situation and expect to withdraw to protect their grade point average. An advisor should emphasize that a student cannot withdraw from courses past the established deadline. The last day to drop a course with a "W" is the fifth week of the semester (September 3 - October 1, 1991).

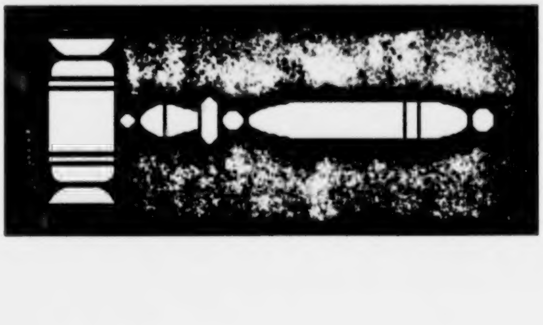
CUT CLASSES TOO FREQUENTLY

Students miss classes frequently because they have things to do that appear more important than the class. The more they cut class the more threatening class becomes. The end result is that the student achieves poor grades in the course or courses which often leads to academic dismissal.

Adapted from Ford, J. Academic Advising, 1986-87, Houston Texas: Houston Baptist University, August 1986, 6, 10, 20-21, 50-51, 57-58, 69, (ERIC Document Reproduction Service ED 276 346).

Academic Advising

Legal Implications



LEGAL IMPLICATIONS OF ACADEMIC ADVISING

BACKGROUND

In an increasingly litigious society, it is important to review periodically the legal implications of advising college students on academic matters. In the past, the judiciary has employed seemingly contradictory doctrines resulting in deferential treatment to higher education. For instance, courts have relied on the doctrine of caveat emptor or "let the buyer beware," placing the burden of progressing through the educational maze squarely on the shoulders of the student.[1] However, the courts have also employed the doctrine of in loco parentis, which recognized college students as children, incapable of making decisions on their own, and the institution as the parent figure, with full authority and responsibility for making decisions.[2]

To add to the deferential treatment, institutions of higher education have enjoyed far-reaching immunity from lawsuits. Public institutions were protected by the governmental immunity doctrine, which shielded state and local governments and their instrumentalities from liability for their sovereign acts. Private institutions were protected by the charitable immunity doctrine, which shielded charitable institutions from liability that might divert their funds from the purposes for which they were originally intended.[3]

The legal status of college students has changed dramatically and rapidly since 1960. In 1961, the court rejected the doctrine of in loco parentis,[4] and in 1971, ratification of the Twenty-Sixth Amendment lowered the voting age from 21 to 18. In 1969, the Supreme Court determined that students at public institutions should be guaranteed certain rights under the Consitution.[5] Students at private institutions are also guaranteed Constitutional rights if "state action" is present (when the institution is acting on behalf of the state).[6 7 8] In order to avoid potential problems related to these changes, the academic advisor, including faculty and staff who may perform that function, should be familiar with the various legal relationships and the baics of tort law.

CONTRACTUAL RELATIONSHIP

In academic matters, there exists a contractual relationship between the student and the institution.[9] The terms of the contract are explicitly stated in the college catalog, recruiting brochures, student handbooks, and other published materials.[10 11] It is important for academic advisors to have access to and be familiar with any published materials available to the student.

The terms of the contract can also be implied, as was the case in Behrend v. State of Ohio (1977). In this case, students enrolled in Ohio University School of [illegible] ree in ar[illegible] enrollment, the School lost its accreditation and [illegible] Univer[illegible] decision to discontinue the architecture program. The court found that when a student enrolls in a university for instruction in a professional program it is implied that the program is and will continue to be accredited by the appropriate agency and will continue existence through graduation. Academic advisors should continually place themselves in the position of students to determine their expectations.

The effective date of the contract is usually considered to be the date the student matriculates, the date the institution accepts the student's application and fees.[13] It is important to realize that once students matriculate, they are entitled to the services outlined in published materials. If the institution fails to provide these services, usually including academic advising, the institution could be liable for breach of contract.

The catalog and other published materials are not the only basis for the contract. Statements made by advisors create terms or promises the insitution must keep if the student perceives the advice to be authoritative. For instance, a student was advised by faculty members, the head of the department, and members of the counseling and guidance staff that he could complete his degree by taking two courses without attending class. This arrangement allowed the student to begin law school before actually completing his undergraduate degree requirements. The student successfully completed the courses, but at the time of his expected graduation, the student was denied his degree. The college argued that only the dean of the faculty had the authority to permit students to take courses without attending class. The court held that the student "acted in obvious reliance upon the counsel and advice of members of the staff of the college administration to whom he was referred" and furthermore: "The dean of the faculty may not escape the binding effect of the acts of his agents performed within the scopre of their apparent authority...."[14]

Regarding statements made by advisors, faculty, and staff, the courts require evidence that the statements were actually made. The student's work alone has not been sufficient evidence.[15] However, in order to avoid such legal confrontations, it is helpful for academic advisors to keep notes or confirm discussions in writing, especially if the advising may affect the student's graduation.

It is important to realize the contract can be modified by the institution with proper notice to the student affected by the change. Most insitutions cover this with statements in the catalog. Common practices are to either reserve the right to make changes with proper notice[16] or to allow the student to complete his or her degree under the requirements in effect when the student entered the institution.[17]

CONSTITUTIONAL RELATIONSHIP

As mentioned earlier, the rights of students at public institutions, and private institutions that act in the state's interest, are protected by the Constitution.[18] These rights include First Amendment rights (freedom of speech, press, assembly, religion); Fourth Amendment rights (search and seizure); and Fourteenth Amendment rights (deprivation by State of life, liberty, or property without due process and equal protection). [illegible] relationship [illegible] apply to advisors should remember the following regarding consitutional rights of students.

1. Students are free to express their opinion as long as it does not injure anothers.

2. The degree sought by students may be determined to be a property interest requiring due process prior to denial.

3. Every student must be treated equally unless there exists a compelling reason to not treat a particular student(s) equally.

STATUTORY RELATIONSHIP

The academic advisor should become familiar with the various state and federal statutes that affect student rights. The scope of this article does not permit a review of state statutes; however, Gehring provides the following analysis of the major federal statutes.[19]

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs or activitie RECEIVING FINANCIAL ASSISTANCE.

Title IX of the Education Amendments of 1972 prohibits discrimination on the bais of sex in educational programs and activities RECEIVING FEDERAL FINANCIAL ASSISTANCE. The regulations to this law specifically address discrimination in scheduling students in classes, advising them in finding employment, counseling, and providing other services. For instance, if advisors help the student find jobs after graduation, they must be sure that the institution with which the student seeks employment does not discriminate based on sex. Unless there is a bona fide occupational qualification for a position, all student assistants must be treated equally.

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against otherwise qualified handicapped persons in programs or activities RECEIVING FINANCIAL ASSISTANCE. Handicapped persons should be allowed to enroll in any course for which they are qualified. Furthermore, classes and advisors must be made accessible to handicapped students.

Family Educational Rights and Privacy Act of 1974 requires that insitutions allow students access to their educational records. Only individuals with an OFFICIAL need to know resulting from a LEGITIMATE EDUCATIONAL INTEREST should be given access to the records without the student's written permission. All others, including all individuals outside the university, should be cleared with the student in writing.

TORT LAW

A tort is a CIVIL wrong-doing rather than a criminal wrong-doing. Persons are required to act as reasonable and prudent persons and must not interfere with another's person, property, or reputation. In the case of acdemic advisors, the established behavior is that of other reasonable and prudent academic advisors. The two most common torts are negligence and defamation.

An academic advisor is negligent if he or she has, or assumes, a duty to perform; acts or fails to act, thus breaching the duty; and an injury results from the breach. For example, if a professor offers to advise a student (accepting a duty) and provides bad advice (breaching the duty) that results in the student having to take extra courses to graduate (injury caused by professor's breach), the professor is guilty of negligence. The student must have proof, either in writing or from a witness, in order to press the case. The professor, or the insitution on the professor's behalf, would then have to pay damages to the student.

Defamation is a false statement made by one party to a second party about a third party that results in injury. Defamation can take two forms: slander, or verbal defamation; and libel, or written defamation. Generally, the information shared between academic advisors, including faculty, is protected by qualified privilege resulting in the advisor acting in an official capacity without maliciousness and in good faith. For instance, advisors are often asked to provide information about students for the purpose of employment or entering a particular educational program. Usually, such information enjoys qualified privilege. However, malicious statements, or statements made outside the advisor's responsibilities, which injure the student could constitute defamation.[20]

NOTICE

While this article is intended to review the legel implications of academic advising, it is not intended to provide legal opinion. For particular situations, the reader should alwlays consult the university counsel.

FOOTNOTES

[1] Peek v. Gurney, L. R. 6, H. L. 377 (1873).

[2] Gott v. Berea College, 161 S. W. 204 (Ct App Oh 1977).

[3] William A. Kaplan, The Law of Higher Education, 2nd Ed. (San Francisco: Jossey-Bass, 1985) p. 56.

[4] Dixon v. Alabama State Board of Education, 294 F. 2d 150 (5th Cir 1961).

[5] Tinker v. Des Moines Independent School District, 393 U.S. 503 (1969).

[6] Burton v. Wilmington Parking Authority, 365 U.S. 715 (1961).

[7] Powe v. Miles, 407 F. 2d 73 (2d Cir 1968).

[8] State v. Schmid, 423 A. 2d 615 (NJ 1980).

[9] Connelly v. University of Vermont and State Agricultural College, 244 F. Suppl. 156 (Vt 1965).

[10] DeMarco v. University of Health Sciences, 352 N.E. 2d (Ill App 1st Dist 4th Div (1979).

[11] Steinberg v. Chicago Medical College, 371 N.E. 2d 634 (In 1977).

[12] Behrend v. State of Ohio et al., 379 N.E. 2d 617 (Ct App Oh 1977).

[13] Steinberg v. Chicago Medical College.

[14] Blank v. Board of Higher Education of NYC, 273 N.Y.S.2d 796 (S Ct Sp Term Kings City, 1966).

[15] Holloway v. Universisty of Montana, 582 P. 2d 1265 (Mont 1978).

[16] Blank v. Board of Education of the City of New York.

[17] University of Texas Health Science Center v. Babb, 646 S.W. 2d 502 (Tex App 1st Dist 1982).

[18] Mahavongsana v. Hall, 529 F. 2d 448 (5th Cir 1976).

[19] Donald D. Gehring, "Legal Issues in Academic Advising," in Roger B. Winston, Jr., et al. (eds.), Developmental Academic Advising (San Francisco: Jossey-Bass Publishers, 1984), pp. 406-408.

[20] Gehring.

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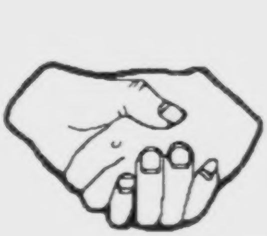
Source: Nowicki, Michael. (1987). Legal Implications of Academic Advising. NACADA Journal, 7, 83-86.

Advisees

Tips...



Characteristics of a Good Advisee

A Good Advisee...

-gathers all relevant decision-making information.

-clarifies personal values and goals.

-is knowledgeable about policies, procedures, and requirements.

-accepts responsibilities for decisions.

Source - The American College Testing Program, 1979.

Students may NOT withdraw from these courses:

Basic Writing

English Composition

Advanced Placement English

Basic Oral Communication

World History I

World History II

Developmental Reading

Introductory Algebra

Developmental courses and do not meet the General Education Program requirements. They are considered additive credits.

Basic Writing (ENG 100)

Developmental Mathematics (MAT 050)

Introductory Algebra (MAT 100)

Developmental Reading & Study Skills (RDG 122)

Developmental Courses

Do not meet the
General Education Program
Requirements

TIPS ON COURSE SELECTION AND SCHEDULING

The Scheduling Officer develops schedules for first semester freshmen. If it is necessary for you to change your schedule, contact your advisor or go to the office of the Division of Undeclared Majors in Horton Hall, Room 103.

However, you will develop your second semester schedule in consultation with your academic advisor in November, 1991. You will receive a letter about details for scheduling from the Division of Undeclared Majors in mid-October. The following are a few tips we hope will aid you in making scheduling a smooth, effective process:

1. Arrange a series of meetings with your advisor early in the semester to discuss your interests, skills and abilities, as well as to plan your courses.
2. Arrange a meeting with your advisor early upon receipt of your scheduling packet. Also, make an appointment to meet with your advisor as close as possible to your appointment time with the computer terminal. (CAUTION: Do not lose your appointment letter or you will have to schedule last on your assigned scheduling day).
3. Read all information in the scheduling packet before meeting with your advisor. Also, read the descriptions in the undergraduate catalog (124-214) of courses you would like to take.
4. Plan to take only General Education courses. EXCEPTION: if you plan to "try out" a major, take only Introductory courses in this major.
5. Schedule General Education courses to maintain a balance from the various categories.
6. Plan at least three alternate schedules (in addition to your first preference).
7. Review your schedule carefully to insure that you have not scheduled any conflicts.
8. Prepare one carbonated copy of your Course Election Record (CER)--keep one for yourself, one for your advisor, and one for the computer terminal operator at the Scheduling office.
9. Make sure that your advisor's signature appears on your CER. DO NOT FORGE YOUR ADVISOR'S SIGNATURE.

10. Substitute one of your alternate courses if any of your planned classes are closed. Check to be sure that there are no time conflicts and that all your selection code numbers are correct. If one digit is incorrect, you will have the wrong class.

11. Don't take any course that requires a prerequisite which you have not taken.

12. Pick up a copy of your computer schedule at your Dean's office (Horton Hall 103).

Shippensburg University
Shippensburg, Pennsylvania
Office of the Registrar

EXAMPLE

Undergraduate
COURSE ELECTION RECORD (CER)

1. USE A BALL POINT PEN and PRESS FIRMLY
2. The student presents the white and yellow copies along with add slips to the scheduling area for class scheduling.
3. The advisor keeps the pink copy after signing.
4. After classes are scheduled, the Registrar returns the yellow copy to the student.

1	2	3	4	5	6	7	8	9

Student Social Security Number

Print Name Doe, (Last) Jane A. (First)

Local Address McLean 001

Scheduling for:
☐ Fall 19____
☒ Spring 19 91

College of Study:
☐ Arts & Sciences
☐ Business
☐ Education & Human Services
☒ Undeclared

Major:

Credits earned to date: 0

Today's date: 11-1-91

Advisor Name:

PRIMARY COURSE REQUESTS

Registrar Use	Dept. No.		Course No.			Section No.		Course Title	Time	Meeting Time						Credits
										M	T	W	Th	F	S	
	4	0	0	0	0	0	1	English Composition	1:00	X		X		X		3
	4	2	4	2	0	0	2	World Geography	9:30		X		X			3
	4	1	2	0	0	0	3	World History I	10:00	X		X		X		3
	4	6	0	0	0	0	1	General Psychology	8:00	X		X		X		3
	4	3	1	0	0	0	6	Intro to Music	11:00	M		X		X		3

Total credits to be scheduled: 15

ALTERNATE COURSE REQUESTS

Registrar Use	Dept. No.		Course No.			Section No.		Course Title	Time	Meeting Time						Credits
										M	T	W	Th	F	S	
	4	0	0	0	0	0	3	English Composition	2:00		X		X			3
	4	2	4	2	0	1	4	World Geography	8:00		X		X			3
	4	1	2	0	0	0	1	World History I	9:00	X		X		X		3
	4	6	0	0	0	0	5	General Psychology	8:00	X		X		X		3
	4	3	1	0	0	0	2	Intro to Music	2:00	M		X		X		3

Registrar's Use Only

Jane a. Doe
Student's signature

11-1-91
Date

Advisor's signature

Date

Tips on Managing Your Time Effectively

Studies have shown that college students who are taking five (5) courses need to study at least thirty (30) hours a week outside of the classroom in order to be successful.

How much time do you spend studying?

BEST COPY AVAILABLE

An Hour Well Spent: Profile of a time waster

8:50 Leaves English class, talks briefly with friends in corridor outside of classroom.

8:54 Starts for the library.

8:56 Meets friend, discusses plan for weekend football game.

8:59 Finishes discussion, heads for library

9:02 Arrives at library, stops friend to check when history assignment is due.

9:04 Finishes discussion, enters library.

9:08 Settles down, starts to read psychology assignment.

9:14 Realizes psychology assignment is not due until next week, decides to work on tomorrow's history assignment instead.

9:15 Spots friend at another table, decides to check on English assignment.

9:16 Checks English assigment, discusses football team's prospects in game.

9:20 Finishes conversation, returns to study.

9:21 Counts number of pages in English assignment, realizes assignment cannot be completed in thirty minutes, debates future course of action.

9:23 Decides to read as much as possible anyway.

9:27 Finds English assignment boring, decides to check over Math homework instead.

9:31 Discovers Math homework has not been completed, begins working on remaining problems.

9:40 Completes second math problem, recognizes impossibility of working remaining ten problems in 15 minutes, debates future course of action.

9:42 Decides to go to the CUB.

9:45 Arrives at the CUB, purchases milk and doughnuts.

9:47 Joins group of friends discussing next week's exam.

9:54 Makes comment while leaving for 10:00 math class: "There just aren't enough hours in the day to get all this studying done."

9:59 Arrives at Math class, hopes instructor won't give a quiz over homework assignment.

This student actually studied for less than *one-third* of a possible sixty-minute study period. The remaining time was squandered in a disorganized attempt to start studying. Unfortunately, disorganization and procrastination are typical of many college freshmen. How about you? How much time did you waste today?

Source: Brown, W.F. & Holtzman, W.H. From *A Guide to College Survival*, pp 28. Copyright 1987 by The American Testing Program. All rights reserved. Reproduced with permission.

STEPS ON HOW TO PREPARE A TIME MANAGEMENT PLAN

Efficient time budgeting requires painstaking, systematic planning. The resulting time schedule must be both realistic and practical; that is, it must be sufficiently flexible to handle changing requirements and be adequately balanced between academic work and recreation. For best results, follow this five-step sequence in preparing your schedule:

1. RECORD FIXED TIME COMMITMENTS. Write all your regularly scheduled activities such as classes, labs, religious services, employment, band practice, etc. on your schedule. Label these activities in priority of A, B, and C. If you have more than one A priority on your list, label A1, A2, A3, and so forth. Don't do any of the B's until all of the A's have been accomplished. Set C priorities aside; they often take care of themselves. Allocate your available time to tasks in ordered sequence of priority.

2. SCHEDULE DAILY LIVING ACTIVITIES. Set aside ample time for eating, personal hygiene, dressing, and recreation.

3. SCHEDULE REVIEW TIME. Set aside time for reviewing either before or after each class, as appropriate. For a lecture course (history, psychology, etc.), the time immediately following the class period should be kept free for revising and expanding your notes; for a participation course (speech, foreign language, etc.), the time just prior to class should be reserved for reviewing the day's assignment.

4. SCHEDULE RECREATION TIME. Set aside regular time (but not excessive time) for such recreational activities such as dating, exercising, personal reading, watching television, etc.

5. SCHEDULE PREPARATION PERIODS. For each course, schedule sufficient time for preparing outside assignments. The amount of time to be scheduled for each course will depend upon the difficulty level of the material, your ability to master the material, the grade you wish to receive, and the efficiency of your study methods. Preparation periods should be scheduled at times when interference is at a minimum and should be long enough to permit the accomplishment of a significant amount of work. Be sure to write the name of each course in all time periods on your schedule when you plan to study it.

HINTS ON TIME PLANNING

The following suggestions can help you plan your time efficiently. Read the suggestions, then make a study schedule using the ideas presented.

1. PLAN SUFFICIENT STUDY TIME. Most college classes are planned to require up to two hours of outside work per week per credit hour. By multiplying your credit load by two you can get a good idea of the time you may need to provide for studying. Of course, if you are a slow reader, or have other study deficiencies, you may need to plan more time in order to meet the demands of your course.

2. SET REALISTIC STUDY REQUIREMENTS. You should know from experience about how long it will take you to write a 1500-word English composition, to work 30 algebra problems, to read a 45-page history textbook chapter, or to translate two pages of Spanish sentences. Be realistic in scheduling your preparation time. Don't underestimate!

3. STUDY AT REGULAR TIMES AND PLACES. Establishing habits of regularity in studying is extremely important. Knowing what you are going to study, and when, saves a lot of time in making decisions. Students generally study either in the library or in their room. Research has demonstrated that the best place to study is the library. This seems quite sensible when considering that the library is designed specifically for scholarly study. There are fewer distractions--less temptation to put your studying aside--in the library then anywhere else. Also, the reference materials needed for outside assignments are often available only in the library.

4. STUDY AS SOON AFTER CLASS AS POSSIBLE. Check over lecture notes while they are still fresh in your mind. Start assignments while your memory of the assignment is still accurate. Remember, one hour of study immediately after class is probably better than two hours of study a few days later.

5. USE FREE TIME FOR STUDYING. Those scattered one or two hours of "free" time between classes are easily wasted. Using them for reviewing materials already known from previous study will result in more time for recreational activities later on.

6. SET A TWO-HOUR LIMIT. After studying one subject for two hours, many people begin to tire and their ability to concentrate decreases rapidly. To keep up your efficiency, switch to studying another subject after two hours.

7. STUDY YOUR HARDEST SUBJECT FIRST. Begin a long study session by starting with the subject that is the least stimulating or most difficult for you. Not only will your mind be fresh while you are doing your hardest work, but you can switch to something more interesting when you begin to feel fatigued.

8. STUDY ON THE WEEKENDS. Some time should always be set aside on the weekends since this is a particularly good time to work on special projects (especially those requiring use of library materials). It is also a good idea to schedule a study session for Sunday evening in order to catch up on back reading or other delayed assignments.

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STRATEGIES

for

EFFECTIVE

CAREER PLANNING

...unraveling the mystery...which major do you choose?

Making a "MAJOR" decision .. some words of advice...

Students are sometimes paralyzed when it comes to making a decision about their major. "What if it's the wrong choice?" "I'm not sure what I want." "I have too many interests."

> Education is a lifelong process, not a goal. Choosing a major is one part of that process, but it is not the process itself nor is it the end of the process. Try to accept the notion that there may not be just one perfect undergraduate major for you: there may be several that are equally appropriate, or there may be no single major that can fulfill all of your needs. The best that you can do is to make a decision that is based on as much relevant and accurate information as you can obtain, and then to realize that the decision does not carve your future into stone. Change is possible at many points in your life, and is probably preferable, if not necessary. Choices must also be made at many stages in your life, and choosing a major is but one of those many, many choices. Make the choice, accept it, and go forward in your academic career. [1]

The key phrase in this advice is to obtain as much relevant and accurate information as you can. In beginning your journey at Shippensburg University, the Division of Undeclared Majors will help you.

---

[1] Reprinted with permssion: Leonard, Michael J. Penn State University, Division of Undegraduate Studies, PATHS: For Students Who Are Exploring Majors. 1989.

"COLLEGE MAJORS DON'T MATTER MUCH"

Soon to every fledgling student
Comes the moment to decide.
But since Angela's a freshman
My advice is: Let it ride.

With apologies to James Russell Lowell, that is pretty much my counsel to my daughter, who is about to begin her first year in college. Soon enough, she'll have to face the sophomore necessity of choosing a major--whether or not she's decided on a career. In the meantime, I tell her, don't worry about it.

A part of the reason for my advice is the memory of my own struggle to decide on a major. I eventually had four of them, none of them related to what was to become my career. But the more important reason is my conclusion, regularly reinforced, that majors just don't matter that much.

The latest reinforcement is from John Willson, a history professor at Hillsdale (Mich.) College, who, having heard once too often the question, "But what do I do with a history major?" has decided to do what he can to put his students at ease.

"Every sophomore has a majoring frenzy," he wrote in a campus publication. "It is typical for sophomores to say, "I want to be an anchorman. Therefore I will major in journalism. Where do I sign up?" They act like they have had a blow to the solar plexus when I say, a) Hillsdale has no major in journalism, and b) if we did, it would no more make you an anchorman than a major in English makes you an Englishman."

But rather than simply repeating what professionals already know, or urging colleges to dispense with the requirement for declaring a major, Willson has reduced his advice to a set of rules and principles.

The first, which college students often find incredible, is that aside from such vocational courses as engineering or computer science, any relationship between majors and careers is largely incidental. Physics majors are hardly more likely to become physicists than business majors are to become entrepreneurs. The rule that derives from this principle:

> *If you wanted your major to be practical, you should have gone to the General Majors Institute.*

The second principle is that students (and colleges) should delay the necessity of choosing for as long as practicable. "Most students (even more parents) have rather vague notions of what the subject of any given subject is...Talk with your parents, but don't let parents, teachers, media experts, television evangelists or fraternity brothers pressure you into a majoring frenzy before you know what the major is all about." In short:

> *All things being equal, it is best to know what you are talking about, which may even prevent majoring frenzies.*

The third is a quote from the Rev. James T. Burtchaell (writing in "Notre Dame" magazine): "Pick your major on the pleasure principle, for what you most enjoy studying will draw your mind in the liveliest way to being educated."

It sounds, says Willson, "dangerously close to one of the worst things the culture teaches us in this era: "If it feels good do it." But choosing a major is a little different from choosing an abusable substance or listening to rock music. The intellectual "pleasure principle" relates to the mind rather than to the glands. And what excites your mind will generally move you close to what the Hillsdale faculty intended for you from the beginning." The rule:

People do not get educated by hitting themselves over the head with hammers.

It's good advice, and not only for students at small liberal arts colleges. A few years ago, the University of Virginia published a booklet, "Life After Liberal Arts," based on a survey of 2,000 alumni of U-Va.'s college of arts and sciences. The finding: 91 percent of the respondents not only believe that liberal arts prepared them for fulfilling careers but would not hesitate to recommend liberal arts majors to students considering those same careers.

Those who responded to the survey included a biology major who later earned a master's of business administration and became president of a bank; a psychology major who was a well-paid executive and English majors whose careers embraced television sales, editorial production, systems analysis and law.

The "winning combination" derived from the Virginia survey: a liberal arts foundation complemented with career-related experience and personal initiative. Colleges aren't assembly lines, that, after four years, automatically deposit students in lucrative careers. What is far likelier is a series of false starts followed by the discovery of a satisfying career. In the Virginia survey, for example, only 16 percent reported being happy with their first jobs.

Willson's advice, the results of the U-Va. survey, and my advice to Angela come down to the same thing: Major in getting an education.

Source: Raspberry, W. (August, 1990). College majors don't matter much. The Washington Post.

MYTH VS. FACT

About Career Planning

MYTH

There's something wrong with me because I haven't decided what I want to major in and what career I want for the rest of my life.

FACT

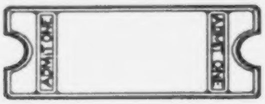
Pushing yourself to make decisions without knowing what you really need and want will waste your time in the long run. It's your life, and choosing a career is a complex process that takes time

REALISTIC GOAL

Through dialogue with yourself and others, discover what you really want and what you're really able to do. Don't worry about what others want for you, or what you think you should want or should be able to do.

MYTH

My degree is my ticket to the life I want.



FACT

Your degree is nothing more than another label,like a major -- a certificate that you fulfilled a certain number of requirements. What you can do with it depends on how good an education you've had - how much you've learned about yourself, your options, and your world.

REALISTIC GOAL

Learn how to effectively express and present yourself, your strengths, and your abilities, so you can move from graduation to a successful career.

MYTH

Choosing a major is a BIG decision, and the major I choose will get me a specific job or career.

FACT

A major is a label that colleges use to organize programs and students. The same interests could lead to any one of several different majors; the same major could lead to a number of different careers; and different majors could lead to the same job.

REALISTIC GOAL

By taking advantage of the resources the University offers, discover your alternatives - keeping in mind the person you're discovering within yourself.

MYTH

My employer will give me on-the-job-training; all I need to worry about are my courses and grades.

FACT

College offers you many chances to learn what it's like to work and do a job in your career field. Although employers do give new employees on-the-job training, they want some evidence that you can do the job, and that you know what you want and how to fit in, and that you've tested yourself -- that you aren't just booklearning and bluster.

REALISTIC GOAL

Use every opportunity the college and community offer to gain experience that will test your interests and preparation, help you impress a prospective employer, and give you a head start on a satisfying career.

Source: Crockett, D., Advising Skills, Techniques, and Resources pp. 795-799.

CAREER EXPLORATION & PLANNING SEMINAR

The Career Exploration & Planning Seminar is a non-credit career course for new students. It is designed to increase the level of vocational maturity of participants as well as to assist them in making sound career decisions. The course content includes career exploration and planning activities, decision-making skills and knowledge and use of career information.

COURSE OBJECTIVES:

Upon completion of this seminar the students should be able to:

1. determine the significance of the planning process in career development;
2. describe and use a decision making process that can be applied to career and other life decisions;
3. describe, locate, and utilize career information;
4. describe and integrate information about self--self concept, interests, skills, experiences and values;
5. describe specific information about occupations of one's preference;
6. describe and understand personal barriers that affect career decision making;
7. make a tentative career choice and locate a corresponding major offered at the University.

Division of

Undeclared Majors

ACADEMIC PLANNING AS A CAREER STRATEGY

If you are concerned about employment opportunities after graduation, then perhaps the following eleven hints may be of some use for planning your academic and future career.

1. CHOOSE A MAJOR THAT SATISFIES YOU

If you want to study elementary education or history or astronomy or aerospace engineering, then do just that. Do not permit glib generalizations that graduates in certain majors face a tough job market to sway your decision totally. Job opportunities are an important consideration, but not the underlying reason for a college education. Success in any major demands both interest and abilities in that area. If you choose a major strictly for its job possibilities and do not take into account your academic background and personal interests, then you could be headed for trouble. Get all the facts (course requirements, etc.) and make a careful assessment of yourself in relationship to that particular major.

2. THINK PRACTICALLY AND CREATIVELY

Obsession with your future can only lead to needless anxiety, but mature concern cannot hurt you. Immediately upon finding a major that suits your interests and abilities, begin to make it srequirements and its flexibility work for you. Take a good look at your major--especially if it's in a so-called non-professional area, e.g., English, Art, History, Biology--and see whether you can use statistics, computer science, business, or technically related courses as requirements, as a minor, or as electives.

3. STRENGTHEN YOUR COMMUNICATION SKILLS

The success of your job interviews and applications and your subsequent success in a career will depend heavily upon how well you communicate. Incorporate as many speaking and writing courses and experiences into your major as you possibly can.

4. BE AWARE OF ADVANCED TRAINING REQUIREMENTS

Some professions and jobs demand advanced schooling or training beyond your college degree. Check into these requirements and make plans for these experiences as early as possible.

5. EARN THE BEST GRADES POSSIBLE

Believe it or not, dedication, enthusiasm, and the ability for self-discipline do impress prospective employers and admission officers of graduate and professional schools. Good grades can be a reflection of these positive qualities.

Academic Policies and Procedures

6. EXHAUST EVERY INFORMATIONAL RESOURCE AT YOUR DISPOSAL
   a. The departmental or faculty academic advisors.
   b. The library.
   c. The Career Development Center.

7. GET PRACTICAL EXPERIENCES

A job candidate's previous record does not count with employers. You should realize that most programs give students the opportunity to earn credit for working experience if students are willing to invest the time and personal initiative. Ask your advisor about an "internship" or "practicum" as part of your academic program. Use your free time wisely by obtaining employment or extracurricular experience related directly or indirectly to your area of interest. These practical experiences will test your motivation and continued interest.

8. TALK WITH PEOPLE IN THE FIELD

Ask them exactly what their job entails and how and why they are hired for those positions, and what they studied in college. You may be surprised by their answers. Also ask them for suggestions regarding courses and academic programs you might follow.

9. RESEARCH CAREER LITERATURE

You do a lot of research for your courses, so do some research for yourself. You will be pleasantly surprised to discover the large variety of careers that exist and how you can fit into many of them regardless of your major. An absolute must for the beginner and for those who do not know where to begin is the OCCUPATIONAL OUTLOOK HANDBOOK. Published by the U.S. Department of Labor, this book provides pages of detailed explanations regarding every conceivable position from accountant to zoologist. The book also includes addresses for futher information once you have identified some specific areas. You can find this book in any library and in most career centers.

10. BE PERSISTENT

If a job is your immediate goal, do not despair or panic if you cannot find one the day after you graduate. Anyone can experience some difficulties in acquiring a satisfying position. You must keep trying. You must make employers aware that you are interested in them. You must help employers realize that they should be interested in you.

11. REMEMBER HINT #1

Make sure that you major in an area that suits your acdaemic and personal abilities and interests. You will do noone any good, especially yourself, if you are unhappy in your work or if you flunk out of school.

Adapted from Danis, Edward J., (1987). Academic Planning as a Career Strategy. NACADA Journal, 7, 87-89.

If a student's major requires Pre-Calculus, Calculus, or Fundamentals of Mathematics, he/she must pass Introductory Algebra (MAT100) with a grade of "C" or better before entrance to the major. If the student's major does not require any of these courses, he/she must achieve a grade of "D" or better in algebra.

QUICK ANSWERS TO COMMON QUESTIONS

1. *What would happen if I do not attend the initial class session?*

   Failure to attend the initial class session will probably result in the student being dropped from the course. Courses must be officially dropped at the Registrar's Office or Horton Hall, Room 103. Students who are unable to attend the first class must give prior notice to the class instructor, departmental secretary, or the Division of Undeclared Majors so they won't be dropped.

2. *What happens if I carry only three courses (9 credits)?*

   A student who carries less than 12 credits is a part-time student. This part-time status could reduce the student's Financial Aid package because Financial Aid awards are based on an "assumed" full-time enrollment--12 or more credits. Also, a student must pass 24 credits from one September to the next, attaining a grade point average of no less than 1.7 for freshmen; a 2.0 for sophomores and upperclassmen.

3. *When should a student repeat a course?*

   A student should repeat all "F"grades as soon as possible, and in some cases, "D" grades. When a course is repeated, only the higher grade counts in the overall average. All attempts to complete the course, however, are still recorded on the student's transcript. According to university policy, a student may only repeat three courses (the same course or different courses) without the inclusion of the prior grade in the calculation. In short, after the third repeat, any repeated courses will be computed in the GPA as a new course.

4. *What happens if I withdraw from a course after Schedule Adjustment?*

   The Schedule Adjustment Period lasts for three (3) days. During this time, a student can withdraw from a course and there will be no record of this course on his/her transcript. However, after the Schedule Adjustment Period until the end of the fifth week of the semester, a "W"grade will show on the transcript for all courses. After the fifth week, an "F"grade will be recorded on the transcript.

5. *Can I take courses at another university to improve my grade point average?*

   No. Only credits, not grades, will be accepted from other institutions. Also, if the grade in this course is less than "C",the course will not transfer.

6. *If I get an "F" grade in a course at Shippensburg University, can I repeat it at another university?*

   No. Courses failed at this university cannot be repeated at another institution and subsequently transferred to Shippensburg University.

Requirements for Declaring a Major

MAJOR	Required GPA
Applied Physics (Pre-Engineering)	2.5
Art	2.0
Biology	2.0
Biology/Health Sciences	2.0
Biology/Medical Technology	2.5
Biology/Secondary Education	2.5*
Business (B.S.B.A.) Accounting Business Info Systems Economics Finance General Management Human Resource Management International Management Management Science Marketing Office Administration Real Estate *A grade of "C" or better in Pre-Calculus is required. Also, all CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.*	2.0
Business Education *All business courses MUST be completed with a "C" average or better. Also, students must have a 2.5 GPA overall before the methods block and the student teaching experience.*	2.0*
Chemistry	2.0
Chemistry/Secondary Education	2.5
Chemistry/Medical Technology	2.5

MAJOR	Required GPA
Communication Arts Secondary Ed	2.5*
Comm/Journalism News Editorial Public Relations Radio/TV *Students must apply to the department and participate in the departmental writing exam. Sign up for the exam in the Communications Department (Stewart 205) at the beginning of each semester. Admission is selective.*	2.3
Computer Science Information Systems Systems Programming Scientific Programming *Students must also have completed Calc I and Structured Computer Programming with a grade of "C" or better.*	2.0
Criminal Justice Corrections Juvenile Justice Law Enforcement	2.0
Earth Science/Secondary Ed	2.5*
Economics (B.A.) *A grade of "C" or better in Pre-Calculus is required. Also, all business courses MUST be completed with a "C" average or better.*	2.0
Economics/Secondary Ed (Comprehensive Social Studies)	2.5*
Elementary Education *Students must submit a letter of application to the department. Students are considered for admission during the annual open periods (first weeks of October and February). Students who apply are ranked according to a score on a rating form. Enrollment is limited and only top ranked students will be admitted.*	2.5

MAJOR	Required GPA
English	2.0
English/Secondary Ed	2.5*
French	2.0
French/Secondary Ed	2.5*
Geoenvironmental Studies	2.0
Geography Land Use Cartography/Spatial World Regions/Tourism	2.0
Geography/Secondary Education (Comprehensive Social Studies)	2.5*
German	2.0
German/Secondary Education	2.5*
Government	
0-59 credits	2.0
60-74 credits *must have completed GOV 104 and GOV 105*	2.3
Over 75 credits	*Not permitted to declare*
History	2.0
History/Secondary Education (Comprehensive Social Studies)	2.5*
Interdisciplinary Arts	2.0
Mathematics *Must have completed Calculus I with "C" or better.*	2.0
Mathematics/Computer Sci *Student must have completed Calculus I and Structured Computer Programming with a "C" or better*	2.0
Mathematics/Secondary Ed *Must have completed Calculus I with a "C" or better*	2.5*
Physics	2.0
Physics/Secondary Ed	2.5*
Political Science/Secondary Ed (Comprehensive Social Studies)	2.5*
Psychology	
0-60 credits	2.0
61 credits or more *A screening interview is required. Contact the Psychology Department to arrange for the screening.*	2.4
Psychology/Secondary Ed (Comprehensive Social Studies)	2.5*
Public Administration	
0-59 credits	2.0
60-74 credits *must have completed GOV 104 and GOV 105*	2.3
Over 75 credits	*Not permitted to declare*
Social Work	2.0
Sociology	2.0
Sociology/Secondary Ed (Comprehensive Social Studies)	2.5*
Sociology/Gerontology	2.0
Spanish	2.0
Spanish/Secondary Ed	2.5*
Speech Communications	2.0
Urban/Rural Studies	2.0

**Students must have a cumulative 2.5 GPA to transfer to these secondary education disciplines. All secondary education majors must have a 2.5 GPA prior to the methods block and student teaching experience.*

Division of
Undeclared Majors

STEPS *IN DECLARING YOUR MAJOR*

1. Check the transfer requirements for the program you are considering.
2. Talk with your advisor about your plans. Also, talk with the department chairperson or another faculty member in the department you are considering.
3. Come to room 103, Horton Hall and pick up a change of major card.
4. Take the change of major card to the department chairperson and the new college dean for their signatures.
5. Return the signed card to the Division of Undeclared Majors

CALCULATING YOUR GRADE POINT AVERAGE

Calculating you grade point average is simple. Basically, you must understand two concepts: the "weight" assigned a course (the number of credits a course is worth) and quality points. You accumulate quality points based on the letter grade you earn. For example: A = 4 points; B = 3 points; C= 2 points; D = 1 points; F = 0 points.

To determine the total quality points earned, you calculate the number of quality points you have accumulated times the "weight" or credits a course is worth. For example:

A = 4 Points
B = 3 Points
C = 2 Points x credits the course is worth = quality points
D = 1 Point
F = 0 Point

OR

Grade earned Weight (credits)
World History B (3 points) x 3 = 9 quality points

SAMPLE SCHEDULE

SEMESTER I

COURSE	Grade	Points		Weight (Credits)		Total Quality Pts		
World History I	B	3	x	3	=	9		
Calc I	D	1	x	4	=	4		
English Comp	A	4	x	3	=	12		
World Geography	C	2	x	3	=	6		
Racquetball	A	4	x	1	=	4		
Totals				14		35	=	2.500(GPA)

SEMESTER II

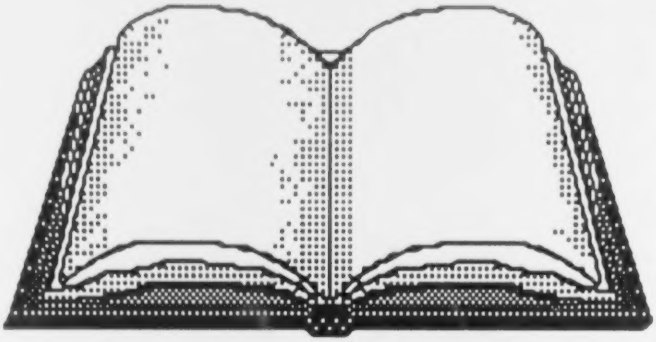
COURSE	Grade	Quality Pts		Credits	Total Quality Pts		
World History II	B	3	x	3	9		
BOC	C	2	x	3	6		
Intro to Fiction	C	2	x	3	6		
Basic Bio	C	2	x	3	6		
Calc I (repeat)	*B*	*3*	*x*	*4*	*12*		
Totals				16	39	=	2.438(GPA)

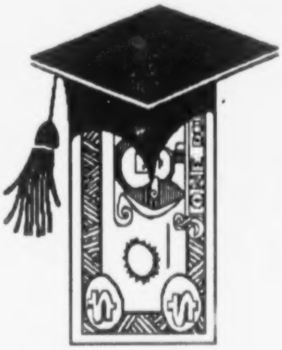
		CREDITS	QUALITY PTS		
OVERALL GPA	Semester 1	14	35		
	Semester 2	*12* *	*35* **		
	Totals	26	70	=	2.692(CUM GPA)

* Calculus I is a repeated course. The credits are already counted in Semester I so you don't count them again in Semester 2.

** Calculus I is a repeated course. You already earned 4 quality points in Semester I so you only count the new quality points earned in Semester 2.

Campus Resources





Student Financial Aid

General Information

Primary Financial Aid Programs

- -Scholarships
- -Grants
- -Loans
- -Student Employment
  - Federal College Work-Study
  - Commonwealth Work-Study

Summer Financial Aid

Financial Aid Counseling

FINANCIAL AID POLICY AND ACADEMIC PROGRESS

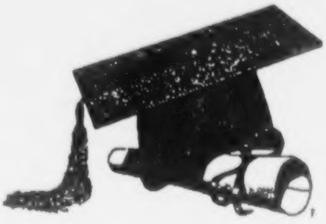
Under the regulations governing participation in all federal student aid programs, students must make satisfactory academic progress toward the completion of a degree in order to remain eligible to receive these funds each year. To this end, freshmen must attain a minimum overall grade point average of 1.7 and complete 24 new credit hours each acdemic year. Every year thereafter, a student must maintain a minimum overall grade point average of 2.0 and complete 24 new credit hours each academic year.

If the student fails to meet either of these requirements, he/she will be ineligible to participate in the following programs: PELL Grant, Perkins Loan Program, Supplemental Educational Opportunity Grant (SEOG), Work-Study, and the Stafford Student Loan Program (all states). Once satisfactory academic progress is established, a student will be eligible to participate in these programs based upon need and the availability of funds.

The University offers ENG100 Basic Writing, MAT100 Introductory Algebra, and RDG122 Developmental Reading and Study Skills to students who need additional preparation beyond high school. Although these courses carry academic credit and the grades are computed into the student's grade point average, they cannot be counted toward graduation, nor do they meet any of the General Education requirements.

Under the regulations governing the Pennsylvania State Grant Program, Pennsylvania Higher Education Assistance Agency (PHEAA), a student must adhere to certain regulations in taking developmental courses. Specifically, a student may take two semesters of 12 credit hours, six of which may be developmental, or 15 credit hours, six of which may be developmental.

If a student is required to take developmental courses in a subsequent semester, he/she must take 15 credit hours, three of which may be developmental.



Career Development Center

Career Planning

-Individual and Group Sessions
-DISCOVER: Computerized Career Decision-Making

Job Search Strategies

-Resumes
-Cover Letters
-Interviews

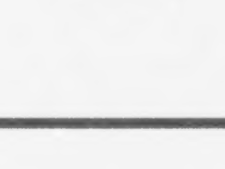
Job Vacancies/Credentials

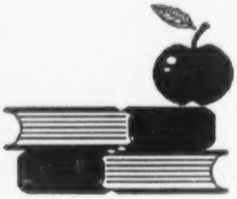
-Hotlines: 532-1205 (Business/Government)
532-1795 (Education/Social Services)

-Reference File

Recruitment

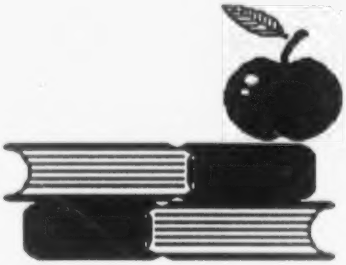
-Interviews
  Prospective Employers
  Graduate School Representatives





Did you know that "...about one out of every four undergraduates spends no time in the library during the normal week, and 65 percent use the library four hours or less each week."? "Nearly one quarter reported spending just one to two hours there each week. This means that about half of all the undergraduate students spend no more that two hours in the library every week."

Source: Boyer, Ernest. College, The Undergraduate Experience in America, 1987.



Library

Reference/Information Desk

Library Instruction Classes

"How To Find" Series

Computerized Online Searches

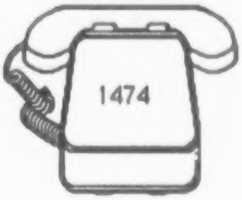
Interlibrary Loan

Photocopying Machines

Media Curricular Center

Microcomputer Lab

Rowland School for Young Children
Library - Rowland Hall



Counseling Center

..... A Listening Ear

Personal Counseling

Group Counseling

Consultation

Workshops

Referrals

Information

S. U. Counseling Center
Wright Hall - first floor
Monday - Thursday 8 am - 6 pm Friday 8 am - 4:30 pm
Extension 1481

Learning Assistance Center

Laboratory for Developmental Courses
-Reading And Study Skills Lab

Individual and Group Tutoring

Classroom Presentations

Brownbag Lunches

Workshops
-Center
-Residence Halls

Study Halls

Open House and

more...

Telephone - 1420

Hours: Monday - Thursday 9:00 a.m. to 9:00 p.m.
Friday 9:00 a.m. to 4:30 p.m.
Sunday (upon availability)

WHY COME IN THE FIRST PLACE...
TO THE LEARNING ASSISTANCE CENTER, THAT IS?

Well, there are many reasons...

Such as...?

Coming to the Learning Assitance Center can:

1. help you to understand difficult concepts;
2. enable you to put those concepts into practice;
3. bolster your confidence;
4. show you the interconnectedness of the textbook and the lecture;
5. provide you with invaluable study skills as well as time management strategies;
6. show you how to read textbooks and other written material.

That sounds good, but will coming to the Center raise my grade?

There are, of course, no guarantees, but many students who come to the Center on a regular basis find that they are able to raise their grades by one level. More importantly, however, they raise their level of understanding.

Where is the Center located and does it cost anything?

The Center is located in the BASEMENT of MCLEAN HALL and, no, tutoring does not cost anything.

What are the hours?

The Center opens at 9:00 a.m. and closes at 9:00 p.m. Monday through Thursday. It again opens at 9:00 a.m. on Friday and closes at 4:30 p.m. The Center sometimes has Sunday hours as well. Look for fliers with more specific hours and subjects.

What subjects are offered?

Reading, Study Skills, Mathematics, Writing, Psychology, History, Geography--just to name a few.

Must I bring anything?

A positive attitude, your syllabus, textbook and any homework you have attempted or completed.

WELCOME--We look forward to serving you.

The LAC Staff

LEARNING ASSISTANCE CENTER MYTHS

Myth #1: *Tutoring at the Learning Assistance Center costs money.*

FACT: No matter how many times a student comes to the Center for tutoring, no money is given to the tutor. Paid tutors are financed through a university allotted budget.

Myth #2: *The Center is open on the weekends.*

FACT: Except for Sunday hours, which are dependant on tutors' schedules, we are not open on the weekends. Generally, we are open from 9:00 a.m. until 9:00 p.m. Monday through Thursday and from 9:00 a.m. until 12:00 Noon Friday. Since staff members are here on Fridays until 4:30 p.m., it is certainly possible for students to get assistance then. Tutors and their students can also set up tutoring hours on Friday between 1:00 p.m. and 4:30 p.m., if no other times are available. Depending on the day, we may close down for an hour or two. Check fliers or call for specific times; our extensions are 1420 and 1182.

Myth #3: *The Center should offer tutoring in every course taught at the University.*

FACT: This simply isn't realistic. The Center has a limited budget. Also, since most of our tutors are students, it isn't always possible to find qualified students in all subjects. Furthermore, we are somtimes hampered by constraints such as students not having financial aid and not wanting to volunteer, or, as in the cost of graduate students, deciding at the last minute not to come to grade school here after all. Despite these constraints, we do try to offer tutoring in basic courses such as writing, algebra and history and in high demand subjects like economics and accounting. In the years to come, we will be focussing our attention more closely on providing help in reading, critical thinking and applicable study skills.

Myth #4: *Tutors will do the work for you. They are especially good at writing papers.*

FACT: Tutors are trained to get you to do the work. In fact, one of our slogans is, "We'd rather you do most of it." While we realize that many times we all need guidance as well as an occasional nudge, we also need to do our own pushing and sweating over the long haul. We learn from doing. It won't help you if the tutor or someone else does your work; also, it is very hard to write a paper or do a complete set of math problems during a 50-60 minute tutoring session.

Myth #5: *Once I start going to tutoring, I won't need to go to class or keep up with the homework. I can just ask my tutor to explain the concepts or go over the steps.*

FACT: Successful learning occurs on more than one level. Tutoring needs to be balanced with studying and class attendance.

Myth #6: *The only thing the Learning Assistance Center does is offer tutoring.*

FACT: Although tutoring is our top priority, the Learning Assistance Center is multi-faceted. We have brownbag lunches, an annual fall Open House, group tutoring, as well as content specific workshops, relaxation workshops in conjunction with the Counseling Center and computer workshops in the library. We also give presentations in classrooms and to groups, such as sororities and fraternities, and even dorm halls. We have opened our doors for special functions, such as "The Festival of Lights", which was hosted by some of the international students. You can come to the Center to read or study or to use the computer; we also have handouts on a variety of subjects, from memory jogging to writing resumes and cover letters. You are welcome to call us for more details.

Myth #7: *The Open House takes place each semester.*

FACT: The annual Learning Assistance Center Open House always takes place in the fall, usually in September. This is a once a year event and it spurpose is to renew our ties to the campus. Everyone is invited to "break bread" with us. We always hope that the Open House will be start of many good, long-lasting friendships.

The Learning Assistance Center staff and I look forward to seeing and serving you year after year.

Source: Butler, B.L. Director of the Learning Assistance Center and Associate Professor of English. Shippensburg University, Shippensburg, Pennsylvania, April 1991.

The Marketplace in the 1990's

BOOMING CAREERS FOR THE DECADE

COMPUTER SCIENCE

The demand for programmers, systems analysts and software developers will continue to grow throughout the decade. Strong math and science skills are necessary, but communication skills are also important.

Education/Training: BS in math, computer science or engineering.

Salary: Starting salaries approximately $30,000; midlevel range from $55,000 to $70,000.

LANDSCAPE ARCHITECT

With the growing concern for our environment, the field of landscape architecture is growing rapidly. Over 6,000 landscape architecture firms operate in the U.S. Eighty percent of landscape architects are employed in private consultancies. Women make up 25 percent of the profession.

Education/Training: BS in landscape architecture or bachelors in another area with a master's degree from an American Society of Landscape Architects (ASLA) accredited university. Forty-two states require a license to practice landscape architecture.

Salary: Salaries start at $22,000; midlevel $34,000.

REPRODUCTIVE ENDOCRINOLOGIST

Due to rising sterility caused by sexually transmitted diseases and the reduced fertility in older mothers, the number of fertility clinics in the U.S. is growing in leaps and bounds. A reproductive endocrinologist may focus in research or treat patients in clinics and hospitals.

Education/Training: M.D. plus 4 year obstectrics-gynecology residency, followed by 2 year fellowship in reproductive endrocrinology.

INDUSTRIAL DESIGNER

Competition from foreign markets is waking up U.S. companies to the fact that paying attention to form can cut costs and increase consumer appeal. Designers work on a wide variety of products by assisting production experts in the choice of materials and cost-effective production processes. A majority of industrial designers serve as consultants.

Education/Training: A degree in industrial design is a must.

Salary: Average salaries begin at $23,000 with experienced designers averaging $45,000.

NURSE ANESTHETIST

There are 23,000 Certified Registered Nurse Anesthetists (CRNAs) in the U.S. who provide the same services as anesthesiologists in emergency rooms and intensive care areas.

Education/Training: A registered nurse with a BS and at least one year's experience in a critical care setting qualifies for a CRNA graduate program which lasts 24 to 36 months, depending on the institution.

Salary: Starting salaries can range from $42,000 to $45,000, and can go as high as $100,000.

TRAVELING NURSE

The demand for nurses will increase almost 50 percent by the year 2000. In response to this need, nurses can travel anywhere in the world and find jobs waiting for them. Traveling Nurse Placement firms represent thousands of nurses nationwide who travel to assignments which can last from three weeks to three months.

Education/Training: Bachelors in nursing.

Salary: Salaries vary according to location.

FINANCIAL PLANNER

More and more middle income families, as well as corporations, are seeking financial planning assistance. Sixty percent of all financial planners work for small boutique firms, while the rest are employed by financial-services institutions and large corporations.

Education/Training: Most planners have a degree in finance or in related fields such as accounting, economics, or business administration.

Salary: Salaries range from $20,000 for entry level positions to over $200,000 for veterans.

GERONTOLOGIST NUTRITIONIST

With increasing numbers of the population in the U.S. over 65, those who specialize in problems of the aged are in demand. Those who are trained in the special dietary needs of the aged will be greatly needed in hospitals, nursing homes and in retirement communities.

Education/Training: A bachelor's degree in nutrition, followed by an internship, or a four year program with 900 hours of service are necessary. Passing a national exam and six months additional experience is required by both of these programs.

Salary: Salaries range from $23,000 to $50,000.

PHARMACIST

The demand for pharmacists is growing beyond the hospitals and drug stores. Today, pharmacists work in a variety of settings such as home health agencies, mental health facilities, and pharmaceutical manufacturers. Women now make up 60 percent of the enrollment in pharmacy schools.

Education/Training: After a minimum of five years of education, (usually two years of liberal arts and three years of intensive chemistry, biology and pharmacy), pharmacists must pass a state board exam and work in a practical setting. There are 74 pharmacy schools in the U.S.

Salary: Salaries vary according to the work setting and can range from $38,000 to $46,000.

CORPORATE BANKRUPTCY ATTORNEY

Corporate bankruptcy attorneys will be in much greater demand in the 90s. This demand is primarily due to new laws which make bankruptcy for even soluble corporations a possible solution to losses many are experiencing in such areas as produce-liability or environmental lawsuits.

Education/Training: Law degree plus advanced continuing education, especially in finance.

SPECIAL EVENTS AND SPORTS MARKETER

This fast paced job involves planning and supervising every detail of sponsored special events such as sports events, festivals and concerts.

Education/Training: Market experience or a marketing degree are musts for this field.

Salary: Starting salaries range from $15,000 to $20,000, but five years or more veterans can earn $60,000 to $80,000.

PROFESSOR

Large numbers of educators who were hired in response to increasing enrollments when baby boomers reached college age in the 60s are reaching retirement age in the mid-90s. As a result, young PhDs face a seller's market.

Education/Training: PhD

Salary: Assistant professors earn $31,000 to $35,000, while full professors can expect $56,000 and up.

DEVELOPMENT OFFICER

Americans gave $6.7 billion to non-profit organizations in 1988 along. That generosity was due in large part to the marketing strategies of professional fund-raisers, or development officers.

Education/Training: To succeed, strong communication skills and expertist in any of the following areas are a plus: marketing, accounting, business administration, computer science, creative writing, economics, psychology and statistics.

Salary: A typical starting salary is $14,000 to $21,000.

HUMAN RESOURCE MANAGER

Dwindling labor pools and rapid changes in technology have created the need for a motivated, well-trained work force. The result is that CEOs are recognizing the impace of Human Resource Managers have on company growth. Duties include: recuiting and placement, compensation and benefits, training and development, employee and labor relations.

Education/Training: While Human Resource Managers come from a variety of undergraduate academic backgrounds, including business, psychology and liberal arts, a master's degree in human resources management or business administration is becoming more essential.

Salary: Starting salaries at large companies are in the mid-20s.

INTERNATIONAL ACCOUNTANT

By the year 2000 over 300,000 accountant and auditor jobs are expected to be added in this fast-growing field. The number of international accountants is responsible for much of that growth. International accountants advise foreign corporations on American financing practices and American corporations and banks on international finances.

Education/Training: Entry level positions may be attained with a BS in accounting, but a certificate in public accounting and/or a masters in business administration helps speed advancement.

Salary: Starting salaries with a BS degree range from $20,000 to $30,000; starting MBA salaries range from $35,000 to $55,000.

ENGINEERS

The field is wide open for those specializing in environmental, electical, mechanical, or industrial engineering. Although engineering majors represent less than 10 percent of all college graduates, they receive one-half of all on-campus job offers.

Many industrial and mechanical engineers work for corporations as manufacturing engineers who are responsible for everything from designing to packaging of products.

Electrical engineers have large numbers of openings in such fields as robotics and broadcasting. The biggest demand for environmental engineers is in urban areas with air and waste pollution problems.

Education/Training: BS or MS in engineering specialty.

Salary: Industrial and manufacturing engineers start at about $28,000 and can earn up to $75,000 plus; electrical engineer's salaries start at about $30,000 and can go up to $100,000 plus; and, environmental engineers can earn $30,000 to start and $45,000 at midlevel.

HEALTH CARE ADMINISTRATION

Today there are more than 274,000 health care administrators, of whom 23,000 are executives. By 1997, those numbers will have increased by 57 percent. Health care is very much a people business with the potential for long hours. Most administrators begin begin their careers in middle management in medical centers or hospitals and may advance to an executive position.

Education/Training: Most health care administrators and executives have a master's in public health or hospital administration.

Salary: Average salary for department heads in $45,000, with chief officers earning from $48,000 to $160,000 plus.

TECHNICAL TRAINER

With increasing technological advances, companies are more than ever in need of technical training for their service and manufacturing workers. In the next 12 years an increase from 21 to 32 percent in the number of technical jobs is expected. Technical trainers specialize in designing, conducting or evaluating training programs.

Education/Training: Many enter the field as technical workers, while other enter with degrees in instructional design, business, or training intervention. Good written and verbal communication skills, along with technical knowledge of an organization's systems, are necessary to succeed.

Salary: Entry level salaries average around $26,000; midlevel salaries around $45,000.

CHEF

The demand for food service workers is greater than ever. It is estimated that in 1990 alone there will be 250,000 job openings for those with culinary training. While traditionally a male dominated field, female membership in the American Culinary Federation has more than tripled since 1986.

Education/Training: Completion of culinary school which can take six months to two years, depending on the program, or three years as an apprentice.

Salary: Salaries start at around $18,000 and average $35,000 at midlevel. With star status, chefs may earn $200,000 or more.

Adapted from:

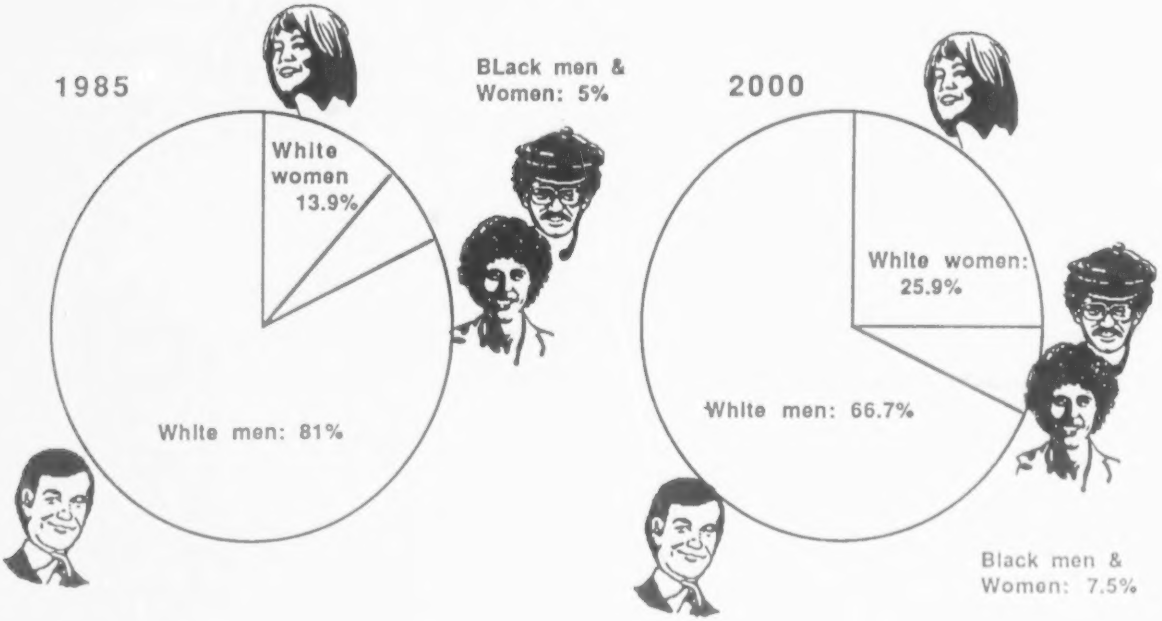
Brown, R. (1991, February). Hot jobs for the 90's. Ebony, pp. 136-141.

Russell, A.M. (1991, July). Twenty-five hottest careers. Working Woman, pp. 73-80.

______ (1990, December). Fifteen fast track careers. Career Opportunities News, pp. 1-3.

______ (1990, December). U.S. News reports on hot track jobs. Career Opportunities News, pp. 1-3.

NEW FACES AMONG THE WELL-TO-DO



Moving Toward a More Diversified Elite

During the next 15 years, white women and blacks of both sexes will join the ranks of the affluent at a dramatic rate. "This is the first time in American history that we're getting substantial participation in the elite by groups other than white men," says James Smith, a labor economist at the Rand Corp.

Although the breakthroughs for women and minorities were most visible in the late 1960s and early 1970s, the principal beneficiaries were younger members of those groups. The chart above shows what will happen as older, less affluent blacks and women leave the labor force and are replaced by new entrants with better training. (Because of rounding, percentages do not add up to 100.) Smith defines the affluent as those whose salaries equal what roughly the top 30% of white males earn--approximately $30,000 or more a year in 1985.

This broadening affluence should be especially significant for non-white communities. Says smith: "A more diverse black leadership should develop, including a greater number of mean and women whose position is based on business success rather than political prominence."

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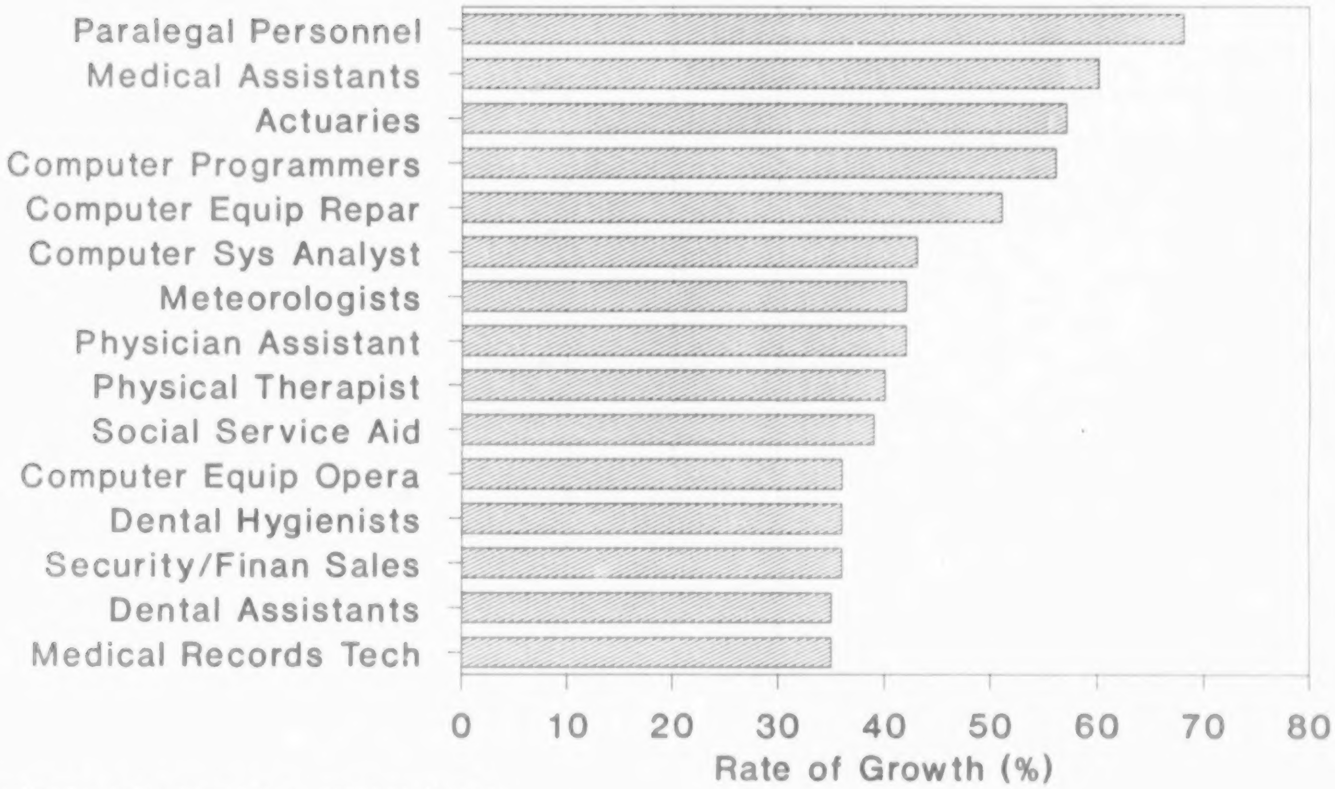
THE MAJORS IN DEMAND 1990

MAJOR	BACHELOR'S	MASTER'S	TOTAL
Business Administration	4286	1185	5471
Accounting	4581	437	5018
Electrical/Electronic Eng.	3293	573	3866
Mechanical Engineering	3160	390	3550
Computer Science	2473	377	2850
Nursing	2368	329	2697
Marketing/Retailing/ Merchandising	2396	170	2566
Elementary Education	1864	275	2139
Liberal Arts	1914	16	1930
Finance/Banking	1337	399	1736
Secondary Education	1356	163	1519
Allied Health/Biomedical	1375	4	1279
Chemical Engineering	999	153	1152
Sales	1096	26	1122
Pharmacy/Pharmaceutical Sales	746	166	912
Industrial Engineering	885	20	905
Computer Programming	726	39	765
Management Information Systems	528	79	607
Civil Engineering	534	61	595
Math/Actuarial Science	474	56	530
Chemistry	359	113	472
Medical Technology	465	5	470
Social Sciences	135	300	435
Biology/Biological Sciences	330	80	410
Computer Engineering	307	42	349
Law/Pre-Law	56	233	289
Aerospace Engineering	223	19	242
Law Enforcement	217	0	217
Production Operations/ Manufacturing Management	173	27	200
Physics	159	33	192
Metallurgy/Materials Science	147	36	183
Systems Engineering	144	37	181
Nuclear Engineering	164	16	180
Aeronautical Engineering	119	48	167
Human Resources	104	57	161
Dietetics	160	0	160
Psychology	148	10	158
Hospitality	131	7	138
Environmental Engineering	59	55	114
Data Processing	106	3	109
Insurance	105	0	105
Communications	96	1	97
Science	82	10	92
Statistics	58	23	81
Agribusiness	56	7	63
Library Science	0	56	56
Geology/Geophysics	19	34	53
Language	44	0	44
Architecture	35	2	37
Criminal Justice	37	0	37
Health Care Administration	8	27	35
Oceanography	28	0	28
Petroleum Engineering	19	3	22
Mining Engineering	2	0	2

Source: Majors in Demand 1990. The Black Collegian, November/December 1989, p. 54.

Fastest Growing Occupations in Pennsylvania



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PA Occupational Information
Coordinating Committee

Undergraduate Degree Programs

Shippensburg University

BACCALAUREATE DEGREE PROGRAMS

The College of Arts and Sciences

B.A.

- Art
- Communication Journalism
  - News Editorial
  - Public Relations
  - Radio/TV
- English
- French
- Geoenvironmental Studies
- Geography
  - Land Use
  - Cartography/Spatial
  - World Regions/Tourism
- German
- Government
- History
- Interdisciplinary Arts
- Mathematics
- Mathematics/Computer Science
- Physics
- Psychology
- Sociology
- Sociology/Gerontology
- Spanish
- Speech Communications
- Urban/Rural Studies

B.S. Ed.

(Secondary Ed)

- Biology
- Chemistry
- Communication Arts
- Earth & Space Science
- English
- French
- Geography*
- German
- History*
- Mathematics
- Physics
- Political Science*
- Psychology*
- Sociology*
- Spanish

**Comprehensive Social Studies*

B.S.

- Applied Physics (Pre-Engineering)
- Biology*
  - Medical Technology
- Chemistry
  - Biochemistry, Health Sciences, Med Tech Tracks
- Computer Science
  - Information Systems
  - Systems Programming
  - Scientific Programming
- Public Administration

*Includes Health Sciences --Pre-Med, Pre-dental, etc.

The College of Business

B.S.B.A.

- Accounting
- Business Information
- Economics
- Finance
- General Management
- Human Resource Management
- International Management
- Management Science
- Marketing
- Office Administration
- Real Estate

B.S.Ed.

(Secondary Ed)

- Business Education
  - *Certification Areas*
    - Accounting
    - Data Processing
    - Marketing
    - Secretarial
- Economics*

**Comprehensive Social Studies*

The College of Education & Human Services

B.S.

- Criminal Justice
  - Corrections
  - Juvenile Justice
  - Law Enforcement

B.A.

- Social Work

B.S.Ed.

Teacher Education (Elementary Education)

Minor

- Art
- Coaching
- Criminal Justice
- Early Childhood
- Economics
- English
- Geography/Earth Science
- Government
- History
- Modern Foreign Languages
  - German, French, Spanish
- Philosophy
- Psychology
- Public Administration
- Reading
- Speech

Concentrations

- Biology
- Chemistry
- Environmental Ed
- Mathematics
- Multicultural Ed
- Multicultural TESOL
- Music
- Sociology

Degree Framework for Undergraduate Students

All degrees awarded by Shippensburg University must be structured in such a way that each fits into the following framework:

1. The completion of a minimum of 120 credit hours in the selected curriculum.
2. The completion of all general education courses and the course sequence requirements in effect in the selected curriculum.
3. An overall grade point average of at least a 2.0 ("C") in the total program of courses.
4. A grade point average of at least a 2.0 ("C") in the academic sequence or major.
5. In the case of teacher education students, a satisfactory history of development in student teaching.
6. Completion of all final course work.

THE

GENERAL EDUCATION PROGRAM...

...the heart of the undergraduate curriculum at Shippensburg University

Shippensburg University

General Education Program

The General Education Program is the heart of the undergraduate curriculum at Shippensburg University

What is the General Education Program?

1. The General Education Program at Shippensburg University comprises half of the credit hours required for graduation.
2. *All* students at the university are required to complete the program.
3. The program includes a series of special courses often taught by senior professors with substantial scholarly credentials.

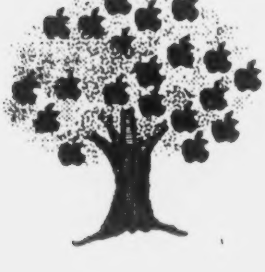
Why have a General Education Program at Shippensburg University?

At the core of the curriculum lies the principle that a good education has two distinct purposes. The first of these is to acquire a set of competencies and a grounding in the arts and sciences which are of sufficient depth and breadth to guarantee real intellectual growth in college and ample cultural awareness in the years beyond. The second purpose is to prepare students for a rewarding and socially beneficial vocation.

The program allows the student to make personal choices *and* to explore subjects not available within the confines of a prescribed major. It also enables the student to satisfy native curiosity, to explore unfamiliar territory, and to cultivate sensitivity toward his environment and an awarness of his personal strengths and weaknesses.

"...Students overwhelmingly have come to view general education as an irritating interruption--an annoying detour on their way to their degree. They too often do not see how such requirements will help them get a job or live a life...if the undergraduate experience is to be renewed, general and specialized education must be viewed as contributions to the common, not competing ends."

-Ernest Boyer



The General Education Program at Shippensburg University is much more than a collection of unrelated courses to "get out of the way". According to Boyer (1987), a general education program should attempt "...to relate the curriculum to experiences common to all people." By exploring "...these universal experiences...students (can) better understand themselves, their society, and the world of which they are a part." Boyer suggests seven areas of study that are essential to this purpose.

WORK
The value of vocation

LANGUAGE/COMMUNICATIONS
The crucial connection

ART
The esthetic dimension

HERITAGE
The recall of our past -- the anticipation of our future

INSTITUTIONS
The social web

SCIENCE
Our relationship to nature

IDENTITY
Our search for meaning

Students who think of things connected begin a lifetime of learning.
Ernest Boyer

...let me eat of the fruit of the tree of knowledge

Robert G. Ingersoll

The General Education Program is divided into

Three Parts:

1. REQUIRED SKILLS AND COMPETENCIES	**15**
2. CATEGORIES OF KNOWLEDGE	**33**
3. GENERAL EDUCATION ELECTIVES	**12**

60 CREDITS

Fully half of your education at Shippensburg is comprised of General Education courses.

PART 1.

REQUIRED SKILLS
AND
COMPETENCIES

15 CREDITS

WORLD HISTORY I

WORLD HISTORY II

BASIC ORAL COMMUNICATION

ENGLISH COMPOSITION

COLLEGE LEVEL MATH

PART 2.

CATEGORIES
OF
KNOWLEDGE

33 CREDITS

CATEGORY A - LANGUAGE and NUMBERS for RATIONAL THINKING – 3 credits

CATEGORY B - LITERARY, ARTISTIC and CULTURAL TRADITIONS - 9 credits

CATEGORY C- BIOLOGICAL and PHYSICAL SCIENCES - 9 credits

CATEGORY D - POLITICAL, ECONOMIC, and GEOGRAPHIC SCIENCES- 6 credits

CATEGORY E- SOCIAL and BEHAVORIAL SCIENCE- 6 credits

The General Education Program
Categories of Knowledge- 33 Credits

CATEGORY A - *Language/Numbers for Rational Thinking* - 3 credits (1 course)
Select ONE course

HUMANITIES

ART 215 Color and Two-Dimensional Design
ENG 223 The Grammars of English
MUS 110 Fundamental Music Skills
MUS 212 Music Theory I
PHL 101 Introduction to Philosophy
PHI 102 Reflective Thinking
PHL 103 Introduction to Theories of Knowledge
PHL 104 Introduction to Religious Studies
PHL 105 Introduction to Theories of Morals
PHL 106 Introduction to Theories of Reality
SPE 101 Fundamentals of the Communication Process
SPE 352 Debate

MATHEMATICS & COMPUTER SCIENCE

CPS 105 Computer Science for Liberal Studies
CPS 180 Microcomputer BASIC (need background)
CPS 240 Introduction to FORTRAN Programming
MAT 102 Introduction to Statistics
MAT 105 Mathematics for Liberal Studies
MAT 110 Fundamentals of Mathematics I
MAT 124 Pre-Calculus Mathematics
MAT 170 Elementary Statistics for Social Science
MAT 181 Applied Calculus I
MAT 211 Calculus I

MODERN LANGUAGES

FRN 101 Beginning French I
FRN 102 Beginning French II
FRN 103 Intermediate French
FRN 200 Introduction to Reading & Translating French
FRN 202 Intermediate French Conversation
FRN 215 Commercial French
GER 101 Beginning German I
GER 102 Beginning German II
GER 103 Intermediate German
GER 200 Introduction to Reading & Translating German
GER 203 Intermediate German Conversation
GER 215 Commercial German
SPN 101 Beginning Spanish I
SPN 102 Beginning Spanish II
SPN 103 Intermediate Spanish
SPN 200 Introduction to Reading& Translating Spanish
SPN 202 Intermediate Spanish Conversation
SPN 250 Commercial Spanish

CATEGORY B - *LITERARY, ARTISTIC AND CULTURAL TRADITIONS* - 9 CREDITS (3 courses)

Select ONE Literature requirement
ENG 150 Introduction to Fiction
ENG 151 Introduction to Poetry
ENG 152 Introduction to Drama
ENG 243 The Art of the Film (Not for Freshmen)
FRN 350 Readings in French Literature
GER 321 Readings in German Literature to the 18th Century
GER 322 Readings in 19th & 20th Century German Literature
SPN 229 Hispanic Folklore (Taught in English-must read Spanish)
SPN 260 Masterpiece of Spanish Literature
SPN 261 Masterpieces of Spanish-American Literature

Select TWO courses - Artistic & Cultural Traditions (each from a different discipline)
ART 101 Art Appreciation
ART 231 Art History I
ART 232 Art History II
ART 339 History of American Art
ART 274 Arts and Crafts
FRN 225 French Civilization (Taught in English-must read French)
GER 150 German Civilization & Culture
SPN 150 Spanish Civilization and Culture
MUS 121 Introduction to Music
SOC 270 Sociology of the Arts
SPE 121 Introduction to Theater
SPE 240 The Dramatic Narrative Film

CATEGORY C - *BIOLOGICAL AND PHYSICAL SCIENCES*- 9 CREDITS (3 courses)

One course must be taken from THREE of the following four disciplines (three courses for 9 credits)

BIO 100 Basic Biology
BIO 105 Biological Sciences: A Laboratory Approach
BIO 106 Principles of Biology (Foundation course for Biology majors-required by most science majors)
BIO 140 Introduction to Ecology (Not for Biology majors)
BIO 145 Problems of the Environment
BIO 150 Human Biology
BIO 208 Field Biology
BIO 248 Field Natural History
BIO 265 Human Genetics

*CHM 103 Chemistry: A Cultural Approach	(see description under NOTES below)
*CHM 105 Chemistry: An Observational Approach	(see description under NOTES below)
*CHM 121 Chemical Bonding	(see description under NOTES below)

ESS 108 Conservation of Natural Resources
ESS 110 Introduction to Geology
ESS 111 Introduction to the Atmosphere
ESS 210 Physical Geology

PHY 100 Basic Physical Science
PHY 110 Physics for Society
PHY 115 Physical Science: A Laboratory Approach
PHY 121 Introductory Physics I
PHY 205 Intermediate Physics I

CATEGORY D - *POLITICAL, ECONOMIC AND GEOGRAPHIC SCIENCES* - 6 CREDITS (2 courses)

Select TWO - Each course must be from a different discipline

ECN 101 Principles of Macroeconomics
ECN 102 Principles of Microeconomics
GEO 101 World Geography
GEO 103 Geography of United States and Canada
GOV 104 American Government: Constitutional and Political Foundations
GOV 105 American Government: Institutions & Public Policies
GOV 150 Introduction to International Relations

CATEGORY E - *SOCIAL AND BEHAVIORAL SCIENCES* - 6 CREDITS (2 courses)

Select TWO - Each course must be from a different discipline

ANT 111 Cultural Anthropology
ANT 211 Comparative Cultures
GEO 140 Cultural Geography
PSY 101 General Psychology
SOC 101 Principles of Sociology

NOTES Chemistry courses:

*CHM 103 Chemistry: A Cultural Approach - Appropriate only for non-science majors. It discusses some basic ideas of chemistry in a non-mathematical way and shows how chemistry is involved in our lives.

*CHM 105 - Chemistry : A Laboratory Approach - Is designed for non-science majors who want a laboratory experience. It requires a minimum amount of mathematical reasoning, for example, in determining mass relationships from chemical formulas and equations.

*CHM 121 Chemical Bonding - First chemistry course for a well prepared science major. Student should have had a college prep high school chemistry course and be comfortable with math through algebra.

PART 3.

GENERAL EDUCATION

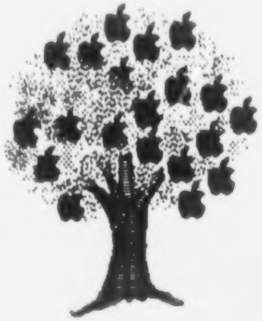
ELECTIVES

12 CREDITS

Six credits must be taken from the General Education Program courses and must be at the 200 level. The remaining credits can be from any course in the catalog for which you meet the prerequisites.

... an investment in knowledge pays the best interest.

Benjamin Franklin



DIVISION OF UNDECLARED MAJORS
STUDENT RECORD OF GENERAL EDUCATION COURSES

Student's Name:____

Directions: List all General Education courses completed. Use the attached lists of General Education courses to record the exact title of courses.

I. REQUIRED SKILLS and COMPETENCIES (15 CREDIT HOURS)

___ENGLISH COMPOSITION /ADVANCED COMP. Grade_____
___WORLD HISTORY I Grade_____
___WORLD HISTORY II Grade_____
___BASIC ORAL COMMUNICATION (BOC) Grade_____
___MATH COMPETENCY____________________________Grade_____

DEVELOPMENTAL COURSES (DO NOT count toward graduation)
___Basic Writing ___Developmental Reading & Study Skills
___ Developmental Math ___Introductory Algebra

II. CATEGORIES OF KNOWLEDGE: "A" - "E" (33 CR. HOURS)

CATEGORY "A" - LANGUAGE and NUMBERS for RATIONAL THINKING (3 Credit Hours)

Course____Grade_____

CATEGORY "B" - LITERARY, ARTISTIC & CULTURAL Traditions (9 Credit Hours)
Literature Course (One)____________________________Grade_____

Course____Grade_____

Course____Grade_____

CATEGORY "C" - BIOLOGICAL and PHYSICAL SCIENCES (9 Credit Hours)

Course____Grade:____

Course____Grade_____

Course____Grade_____

CATEGORY "D" - POLITICAL, ECONOMIC and GEOGRAPHIC Sciences (6 Credit Hours)

Course____Grade_____

Course____Grade_____

CATEGORY "E" - SOCIAL and BEHAVIORAL Sciences (6 Credit Hours)

Course____Grade_____

Course____Grade_____

III. GENERAL EDUCATION ELECTIVES (12 CREDIT HOURS)

Course (200 lvl)__________________________________Grade_____
Course (200 lvl)__________________________________Grade_____
Course____Grade_____
Course____Grade_____

College Level
Math Requirements for the
General Education Program

RECOMMENDED COLLEGE LEVEL MATHEMATICS COURSES REQUIRED TO SATISFY THE GENERAL EDUCATION PROGRAM

MAJOR	RECOMMENDED MATHEMATICS COURSE
Art (B.A.)	*ANY ONE of the following:* **Introduction to Statistics** **Mathematics for Liberal Studies** **Fundamentals of Mathematics I** **Elementary Statistics for Social Science** **Pre-Calculus**
Applied Physics (Engineering) (B.S.)	**Pre-Calculus OR Calculus I**
Biology (B.S.)	**Pre-Calculus OR Calculus I**
Biology - Health Sciences Tract (B.S.)	**Pre-Calculus OR Calculus I**
Biology - Medical Technology (B.S.)	**Pre-Calculus OR Calculus I**
Biology Education (B.S. Ed.)	**Pre-Calculus**
Business (B.S.B.A.) *All degree areas listed below:* Accounting Business Information Systems Economics Finance General Management International Management Management Science Marketing Office Administration Personnel/Administration/ Industrial Relations Real Estate	All Business B.S.B.A. Tracts ***REQUIRE*** Pre-Calculus
Business Education (B.S. Ed.) *All Certification Areas listed below:* Accounting Data Processing Marketing Secretarial	**Introduction to Statistics OR Pre-Calculus** **(Business Mathematics is also required by the major but will not count as the General Education Math course)**
Chemistry (B.S.) Biochemistry (B.S.)	**Pre-Calculus OR Calculus I**
Chemistry Education (B.S. Ed.)	**Pre-Calculus OR Calculus I**

Communication Arts (Secondary Ed-B.S.Ed.)	*Any ONE of the following:* Introduction to Statistics Elementary Statistics for Social Science OR Mathematics for Liberal Studies
Communication/Journalism (B.A.) *All areas* News Editorial Public Relations Radio/Television	*Any ONE of the following:* Mathematics for Liberal Studies Introduction to Statistics Elementary Statistics for Social Science
Computer Science (B.S.) *All Areas* Information Systems Scientific Programming Systems Programming	Pre-Calculus OR Calculus I
Criminal Justice (B.S.) *All Areas* Corrections Juvenile Justice Law Enforcement	Intro. to Statistics OR Elem. Statistics for Social Science
Earth Science (B.S.Ed.)	*Any ONE of the following:* Introduction to Statistics Elementary Statistics for Social Science Pre-Calculus OR Calculus I
Economics (B.A.)	Pre-Calculus
Economics Education (B.S.Ed.)*	Pre-Calculus
Elementary Education (B.S.Ed.)	Fundamentals of Mathematics I
English (B.A.)	Introduction to Statistics OR Mathematics for Liberal Studies
English Education (B.S.Ed.)	Introduction to Statistics OR Mathematics for Liberal Studies
French (B.A.)	See Modern Languages
French Education (B.S.Ed.)	See Modern Languages
Geography (B.S.) *All Areas* Cartography/Spacial Info. Land Use World Regions/Tourism	*Any ONE of the Following:* Elementary Statistics for Social Science Introduction to Statistics
Geography Education (B.S.Ed.)*	Elementary Statistics for Social Science
GeoEnvironmental Studies (B.A.)	*Any ONE of the Following:* Elementary Statistics for Social Science Introduction to Statistics Pre-Calculus OR Calculus I
German (B.A.)	See Modern Languages

German Education (B.S.Ed.)	See Modern Languages
Government (B.A.)	Elementary Statistics for Social Science
History (B.A.)	*Any ONE of the following:* Elementary Statistics for Social Science Introduction to Statistics Pre-Calculus OR Calculus I OR Applied Calculus Mathematics for Liberal Studies
History Education (B.S.Ed.)*	*Any ONE of the following:* Elementary Statistics for Social Science Introduction to Statistics Pre-Calculus OR Calculus I OR Applied Calculus Mathematics for Liberal Studies
Mathematics (B.A.)	Pre-Calculus OR Calculus I
Mathematics Education (B.S.Ed.)	Pre-Calculus OR Calculus I
Mathematics/Computer Science (B.S.)	Pre-Calculus OR Calculus I
Modern Languages (B.A.) *All Languages* French German Spanish	*Any ONE of the following:* Elementary Statistics for Social Science Introduction to Statistics Pre-Calculus OR Calculus I OR Applied Calculus Mathematics for Liberal Studies
Modern Languages Education (B.S.Ed.) French German Spanish	*Any ONE of the following:* Elementary Statistics for Social Science Introduction to Statistics Pre-Calculus OR Calculus I OR Applied Calculus Mathematics for Liberal Studies
Physics (B.A.)	Pre-Calculus OR Calculus I
Physics Education (B.S.Ed.)	Pre-Calculus OR Calculus I
Political Science (B.S.Ed)*	Elementary Statistics for Social Science
Psychology (B.A.)	*Any ONE of the following:* Elementary Statistics for Social Science Introduction to Statistics Pre-Calculus OR Calculus OR Applied Calculus Mathematics for Liberal Studies
Psychology Education (B.S.Ed.)*	Elementary Statistics for Social Science Introduction to Statistics
Public Administration (B.S.)	Elementary Statistics for Social Science
Social Work (B.A.)	Elementary Statistics for Social Science

Sociology (B.A.) *All Areas* Sociology/Gerontology (B.A.)	Elementary Statistics for Social Science
Sociology Education (B.S.Ed.)*	Elementary Statistics for Social Science
Spanish (B.A.)	See Modern Languages
Spanish Education (B.S.Ed.)	See Modern Languages
Speech Communication (B.A.)	*Any ONE of the following:* Introduction to Statistics Elementary Statistics for Social Science (Recommended) Pre-Calculus OR Calculus I
Urban Studies (B.A.)	*Any ONE of the following:* Introduction to Statistics Elementary Statistics for Social Science Pre-Calculus OR Calculus I

* Comprehensive Social Studies

The following majors require a higher level math in addition to the General Education competency:

Applied Physics
Biology (Including Education and Health Professions Tract)
Chemistry (Including Education)
Computer Science
Business (All majors)
Business Education
Economics
Elementary Education (Teacher Education)
Geography (All areas)
Mathematics (Including Education)
Physics (Including Education)

IMPORTANT NOTE

If a student's major requires Pre-Calculus, Calculus, or Fundamentals of Mathematics, he/she must pass Introductory Algebra (MAT100) with a grade of "C" or better before entrance into the major. If the student's major does not require any of these courses, he/she must achieve a minimum grade of "D" in algebra.

College of Arts and Sciences

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The College of Arts and Sciences

B.A.

- Art
- Communications/Journalism:
  - News Editorial
  - Public Relations
  - Radio/TV
- English
- French
- GeoEnvironmental Studies
- Geography:
  - Land Use
  - World Regions/Tourism
  - Cartography/Spatial
- German
- Government
- History
- Interdisciplinary Arts
- Mathematics
- Mathematics/Computer Science
- Physics
- Psychology
- Sociology
- Sociology/Gerontology
- Spanish
- Speech Communiations
- Urban/Rural Studies

B.S. Ed.

- Biology
- Chemistry
- Communication Arts
- Earth & Space Science
- English
- French
- Geography*
- German
- History*
- Mathematics
- Physics
- Political Science*
- Psychology*
- Sociology*
- Spanish

**Comprehensive Social Studies*

B.S.

- Applied Physics (Pre-Engineering)
- Biology*
- Chemistry
  - Biochemistry, Health Services, Med Tech
- Computer Science:
  - Information Systems
  - Systems Programming
  - Scientific Programming
- Medical Technology
- Public Administration

*Includes Health Sciences-Pre-Med, Pre-Dental, etc.

APPLIED PHYSICS-B.S.
(Pre-Engineering)

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I (4 cr)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II

B: Literary, Artistic & Cultural Traditions (9 cr)
___( ) A Writing Course
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___(CHM) 122 Chemical Bonding and IB Lab
___(PHY) 205 Intermediate Physics I
___( ) ______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ENC) 101 Principles of Macroeconomics
OR
102 Principles of Microeconomics
___( )______________________________**

E: Social & Behavioral Science (6 cr)
MUST include a sequence in one discipline **
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Physics Requirements 36 cr

___(PHY) 105 Problem Solving in the Sciences (2 cr)
___(PHY) 150 Engineering Graphics (3 cr)
___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr)
___(PHY) 305 Modern Physics I (4 cr)
___(PHY) 393 Special Topics: Transitional Mechanics (3 cr)
___(PHY) 400 Mechanics (4 cr)
___(PHY) 401 Electricity & Magnetism (4 cr)
OR
(PHY) 402 Electronics (4 cr)
___(PHY) 410 Heat and Thermodynamics (4 cr)
___(PHY) 4xx One 400 level Physics Elective (4 cr)

Mathematics/Computer Science Requirements 20 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *
___(MAT) 213 Calculus III (4 cr)
___(MAT) 223 Differential Equations (3 cr)
___(CPS) 246 Structured Computer Programming (4 cr)

Chemistry Requirements 8 cr

___(CHM) 121 Chemical Bonding (3 cr) *
___(CHM) 125 Lab IB (1 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 126 Lab IIB (1 cr)

Economics Requirement* 3 cr

__(ENC) 101 Principles of Macroeconomics
OR
102 Principles of Microeconomics

*Major requirement fulfills General Education Credit(s)

**A sequence of courses in one disciplines is required by engineering programs at other institutions per the 3-2 agreement with Shippensburg.

Total Credits Required From Shippensburg 97 cr

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Semester I	MAT 211 Calculus I PHY 205 Intermediate Physics I PHY 105 Problem Solving in the Sciences One Gen Ed Course

Student should only take 13 credits the first semester.

Chemistry should be taken in the sophomore year (exceptional students may take it earlier)

Economics is usually taken in the sophomore year.

Structured Computer Programming should be taken early in the program.

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ART-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any math listed in Category A of the General Education Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Visual Arts

A: Required Courses 21 cr

___(ART) 101 Art Appreciation (3 cr)
___(ART) 110 Basic Drawing (3 cr)
___(ART) 210 Drawing II (3 cr)
___(ART) 215 Color & Two-Dimensional Design (3 cr)
___(ART) 232 Art History II (3 cr)
___(ART) 318 Three Dimensional Design (3 cr)
___(ART) An Art History Course (3 cr)

B: Unrestricted Electives 15 cr

Students must elect 5 (ART) courses from below, 4 must be at the 300 level.

___(ART) 231 Art History I (3 cr)
___(ART) 260 Off-Loom Weaving & Stitchery (3 cr)
___(ART) 309 Independent Studio (3 cr)
___(ART) 321 Watercolor I (3 cr)
___(ART) 322 Watercolor II (3 cr)
___(ART) 326 Painting I (3 cr)
___(ART) 327 Painting II (3 cr)
___(ART) 330, 331, 332 Studies in the History and Criticism of Art (3 cr)
___(ART) 339 History of American Art (3 cr)
___(ART) 340 Ceramics (3 cr)
___(ART) 341 Advanced Ceramics (3 cr)
___(ART) 352 Elective Crafts (3 cr)
___(ART) 355 Enameling
___(ART) 360 Weaving & Stitchery (3 cr)
___(ART) 370 Sculpture (3 cr)
___(ART) 380 Printmaking (3 cr)
___(ART) 393 Selected Topics in Art (3 cr)
___(ART) 395 Internship in Art (3 cr)
___(ART) 399 Independent Study (3 cr)
___(ART) 490 Selected Topics in Art (3 cr)

C: Free Electives 24 cr

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

YEAR 1 ART 101 Art Appreciation
ART 110 Basic Drawing
ART 210 Drawing II
ART 215 Color & Two-Dimensional Design
ART 318 Three-Dimensional Design

Double majors (such as art/communication) increase career options.

Students should be aware of the cooperative programs that exist with eight affiliated design schools. Students who spend their junior year at one of these schools obtain an opportunity for more technical experience in visual communication, photography/multimedia, or interior design.

BIOLOGY-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I --if necessary, student may need to take Pre-Calc first
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___(PHY) 121 Introductory Physics
___(CHM) 121 Chemical Bonding
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Biology Requirements

CORE COURSES 26 cr

___(BIO) 106 Principles of Biology (4 cr)
___(BIO) 110 Zoology (3 cr)
___(BIO) 120 Botany (3 cr)
___(BIO) 220 Microbiology (3 cr)
___(BIO) 240 General Ecology (3 cr)
___(BIO) 260 Genetics (3 cr)
___(BIO) 386 Cell Biology (3 cr)
___(BIO) 381 Principles of Evolution (3 cr)
___(BIO) 300-302 Biology Seminar (1 cr)**

Biology Electives 12 cr

Four additional courses, selected with advisement, ONE of which MUST be a physiology course.

___(BIO)______________________________(3 cr)
___(BIO)______________________________(3 cr)
___(BIO)______________________________(3 cr)
___(BIO)______________________________(3 cr)

Math Requirement 4 cr

___(MAT) 211 Calculus I (4 cr)

Physics Requirements 8 cr

___(PHY) 121 Introductory Physics I (4 cr) *
___(PHY) 122 Introductory Physics II (4 cr)

Chemistry Requirement 16 cr

___(CHM) 121 Chemical Bonding (3 cr) *
AND
___(CHM) 125 Lab IB (1 cr)

___(CHM) 122 Chemical Dynamics (3 cr)
AND
___(CHM) 126 Lab IIB (1 cr)

___(CHM) 221 Modern Organic Chemistry I (3 cr)
AND
___(CHM) 225 Lab IIIB (1 cr)

___(CHM) 222 Modern Organic Chemistry II (3 cr)
AND
___(CHM) 226 Lab IVB (1 cr)

Free Electives 6 cr

***Major requirement fulfills General Education credit(s)**

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	BIO 106 Principles of Biology
Semester II	BIO 110 Zoology
Year II	BIO 120 Botany BIO 220 Microbiology and/or BIO 260 Genetics CHM 121 Chem Bonding and lab

Physics is normally taken in the junior year.

***Biology Research may be substituted*

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BIOLOGY / HEALTH SCIENCES TRACK-B.S.

Includes: Pre-Medicine, Pre-dentistry, Pre-veterinary medicine, Pre-optometry, Pre-podiatry, Pre-physical therapy[1] and Pre-pharmacy[1]

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I --student may need to take Pre-Calc first
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )__________________________****

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________________
___( )________________________
___( )________________________

C: Biological & Physical Sciences (9 cr)
___(PHY) 121 Introductory Physics
___(CHM 121) Chemical Bonding
___( )________________________

D: Political, Economic & Geographic Science (6 cr)
___( )________________________
___( )________________________

E: Social & Behavioral Science (6 cr)
___( )________________________
___( )________________________

III. General Education Electives 12 cr

Biology Core Courses

CORE COURSES 17 cr
___(BIO) 106 Principles of Biology (4 cr)
___(BIO) 110 Zoology (3 cr)
___(BIO) 220 Microbiology (3 cr)
___(BIO) 260 Genetics (3 cr)
___(BIO) 386 Cell Biology (3 cr)
___(BIO) 200 Biology Seminar (1 cr)***

Student may be exempt from the following Biology courses depending on minimum 2.8 GPA
-To apply for exemption, see Health Sciences Office
If granted exception, may substitute with advisement,

___(BIO) 120 Botany (3 cr) 9 cr
___(BIO) 240 General Ecology (3 cr)
___(BIO) 381 Principles of Evolution (3 cr)

Biology Electives-Selected with advisement to accommodate specific professional requirements. 21 cr

Select 21 hours from courses below:
___(BIO) 317 Parasitology (3 cr)
___(BIO) 324 Pathogenic Microbiology (3 cr)
___(BIO) 330 Animal Behavior (3 cr)
___(BIO) 350 Human Physiology (3 cr) **
___(BIO) 351 Animal Physiology (3 cr)
___(BIO) 370 Vertebrate Anatomy (3 cr) **
___(BIO) 373 Vertebrate Embryology (3 cr)
___(BIO) 374 Hematology (2 cr)
___(BIO) 375 Histology (3 cr)
___(BIO) 409 Immunology (3 cr)
___(BIO) 450 Endocrinology (3 cr)

Math Requirement 4 cr
___(MAT) 211 Calculus (4 cr) *

Physics Requirements 8 cr
___(PHY) 121 Introductory Physics I (4 cr) *
___(PHY) 122 Introductory Physics II (4 cr)

Chemistry Requirement 20 cr
___(CHM) 121 Chemical Bonding (3 cr) *
AND
___(CHM) 125 Lab IB (1 cr)

___(CHM) 122 Chemical Dynamics (3 cr)
AND
___(CHM) 124 Lab IIA (2 cr)

___(CHM) 221 Modern Organic Chemistry I (3 cr)
AND
___(CHM) 225 Lab IIIB (1 cr)

___(CHM) 222 Modern Organic Chemistry II (3 cr)
AND
___(CHM) 226 Lab IVB (1 cr)
___(CHM) 301 Biochemistry (3 cr)

*Major requirement fulfills General Education credit(s)

**Required for pre-physical therapy students

***Biology Research may be substituted

****Pre-optometry and pre-physical therapy must take MAT 102 Introductory Statistics

Transferrable after 2 years.[1]

Total Graduation Requirements 120 + cr

****

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	BIO 106 Principles of Biology CHM 121 Chemical Bonding and lab
Semester II	BIO 110 Zoology CHM 122 Chemical Dynamics and lab

Physics is normally taken in the junior year.

BIOLOGY / MEDICAL TECHNOLOGY-B.S. 4 + 1 Program

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I --student may need to take Pre-Calc first
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________
___( )______________________
___( )______________________

C: Biological & Physical Sciences (9 cr)
___(PHY) 121 Introductory Physics
___(CHM 121) Chemical Bonding
___( )______________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________
___( )______________________

E: Social & Behavioral Science (6 cr)
___( )______________________
___( )______________________

III. General Education Electives 12 cr

Biology Core Courses

CORE COURSES 31 cr

___(BIO) 106 Principles of Biology (4 cr)
___(BIO) 110 Zoology (3 cr)
___(BIO) 220 Microbiology (3 cr)
___(BIO) 260 Genetics (3 cr)
___(BIO) 317 Parasitology (3 cr)
___(BIO) 324 Pathogenic Microbiology (3 cr)
___(BIO) 350 Human Physiology (3 cr)
___(BIO) 374 Hematology (2 cr)
___(BIO) 386 Cell Biology (3 cr)
___(BIO) 200 Biology Seminar (1 cr)***
___(BIO) 409 Immunology (3 cr)

Biology Electives 7 cr

___(BIO) ______________________
___(BIO) ______________________
___(BIO) ______________________

Math Requirement 4 cr

___(MAT) 211 Calculus (4 cr) *

Physics Requirements 8 cr

___(PHY) 121 Introductory Physics I (4 cr) *
___(PHY) 122 Introductory Physics II (4 cr)

Chemistry Requirement 24 cr

___(CHM) 121 Chemical Bonding (3 cr) *
AND
___(CHM) 125 Lab IB (1 cr)

___(CHM) 122 Chemical Dynamics (3 cr)
AND
___(CHM) 124 Lab IIA (2 cr)

___(CHM) 221 Modern Organic Chemistry I (3 cr)
AND
___(CHM) 225 Lab IIIB (1 cr)

___(CHM) 222 Modern Organic Chemistry II (3 cr)
AND
___(CHM) 226 Lab IVB (1 cr)

___(CHM) 371 Analytical Chemistry (4 cr)
OR
(CHM) 220 Bioinstrumental Analysis (4 cr)

___(CHM) 301 Biochemistry (3 cr)

*Major requirement fulfills General Education credit(s)

***Biology Research may be substituted

Total Graduation Requirements 120 + cr

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Semester I	BIO 106 Principles of Biology CHM 121 Chemical Bonding and lab
Semester II	BIO 110 Zoology CHM 122 Chemical Dynamics and lab

Physics is normally taken in the junior year.

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BIOLOGY B.S.Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I –if necessary, student may need to take Pre-Calc first
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )____________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
___(PHY) 121 Introductory Physics
___(CHM) 121 Chemical Bonding
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___( )____________________________

III. General Education Electives 12 cr

Biology Requirements

CORE COURSES 26 cr

___(BIO) 106 Principles of Biology (4 cr)
___(BIO) 110 Zoology (3 cr)
___(BIO) 120 Botany (3 cr)
___(BIO) 220 Microbiology (3 cr)
___(BIO) 240 General Ecology (3 cr)
___(BIO) 260 Genetics (3 cr)
___(BIO) 381 Principles of Evolution (3 cr)
___(BIO) 386 Cell Biology (3 cr)
___(BIO) 300-302 Biology Seminar (1 cr)**

Biology Electives 12 cr

Strongly Recommended:
___(BIO) 350 Human Physiology (3 cr)
___(BIO)________________________
___(BIO)________________________
___(BIO)________________________

Math Requirement 4 cr

___(MAT) 211 Calculus I *

Physics Requirements 8 cr

___(PHY) 121 Introductory Physics I (4 cr) *
___(PHY) 122 Introductory Physics II (4 cr)

Chemistry Requirement 16 cr

___(CHM) 121 Chemical Bonding (3 cr) *
AND
___(CHM) 125 Lab IB (1 cr)

___(CHM) 122 Chemical Dynamics (3 cr)
AND
___(CHM) 126 Lab IIB (1 cr)

___(CHM) 221 Modern Organic Chemistry I (3 cr)
AND
___(CHM) 225 Lab IIIB (1 cr)

___(CHM) 222 Modern Organic Chemistry II (3 cr)
AND
___(CHM) 226 Lab IVB (1 cr)

Psychology Requirement 3 cr

___(PSY) 101 General Psychology (3 cr)

Professional Education Requirements 27 cr

___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)

The following must be taken concurrently
___(EDU) 340 Teaching of Science In Secondary School (3 cr)
___(EDU) 341 Curriculum & Evaluation in the Secondary Science Classroom I (3 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Also required-a Freshman-Sophomore Field Experience

**Biology Research may be substituted

*Major requirement fulfills General Education credit(s)

Total Graduation Requirements 120+ cr

****

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	BIO 106 Principles of Biology
Semester II	BIO 110 Zoology
Year II	BIO 120 Botany BIO 220 Microbiology and/or BIO 260 Genetics CHM 121 Chem Bonding and lab

Physics is normally taken in the junior year.

CHEMISTRY - B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

- ___(ENG) 101 English Composition OR
  (ENG) 110 Advanced Placement English (3 cr)
  Student may need to take (ENG) 100 Basic Writing first, based on test results.
- ___(SPE) 100 Basic Oral Communication (3 cr)
- ___Mathematical Competency-Required
  (MAT) 211 Calculus I (Pre-Calculus may need to be taken first)
- ___(HIS) 105 World History I (3 cr) AND
- ___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________
___( )______________________
___( )______________________

C: Biological & Physical Sciences (9 cr)
___( ) ______________________
___(PHY) 205 Intermediate Physics
___(BIO) 106 Principles of Biology

D: Political, Economic & Geographic Science (6 cr)
___( )______________________
___( )______________________

E: Social & Behavioral Science (6 cr)
___( )______________________
___( )______________________

III. General Education Electives 12 cr

___(PHY) 206 Intermediate Physics II
___(CPS) Computer Science
___( )____________________
___( )____________________

Chemistry Requirements 36 cr

___(CHM) 121 Chemical Bonding (3 cr)
___(CHM) 123 Lab IA (2 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 124 Lab IIA (2 cr)
___(CHM) 221 Modern Organic Chemistry I (3 cr)
___(CHM) 223 Lab IIIA (2 cr)
___(CHM) 222 Modern Organic Chemistry II (3 cr)
___(CHM) 224 Lab IVA (2 cr)
___(CHM) 361 Physical Chemistry I (4 cr)
___(CHM) 362 Physical Chemistry II (4 cr)
___(CHM) 371 Analytical Chemistry (4 cr)
___(CHM) 381 Advanced Inorganic Chemistry (4 cr)

Math Requirement 8 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *

Physics Requirement 8 cr

___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr) *

Computer Science Requirements 3 or 4 cr

___(CPS) 240 Intro to FORTRAN Programming (3 cr) *
OR
(CPS) 246 Structured Computer Programming (4 cr) *
OR
(CPS) 180 Microcomputer Basic (3 cr) *

Free Electives 18 cr

***Major requirement fulfills General Education Credit(s)**
Total Graduation Requirements 120 cr

* * *

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	CHM 121 Chemical Bonding and Lab IA MAT 211 Calculus I
Semester II	CHM 122 Chemical Dynamics and Lab IIA MAT 212 Calculus II
Semester III	PHY 205 Intermediate Physics I CHM 221 Modern Organic Chem I & Lab IIIA
Semester IV	PHY 206 Intermediate Physics II CHM 222 Mod Organic Chem II & Lab IVA

American Chemical Society Certification available.
See Department Chairperson for details.

CHEMISTRY - BIOCHEMISTRY TRACK-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I (Pre-Calculus may need to be taken first)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

C: Biological & Physical Sciences (9 cr)
___( )___________________________
___(PHY) 205 Intermediate Physics
___(BIO) 106 Principles of Biology

D: Political, Economic & Geographic Science (6 cr)
___( )___________________________
___( )___________________________

E: Social & Behavioral Science (6 cr)
___( )___________________________
___( )___________________________

III. General Education Electives 12 cr

___(PHY) 206 Intermediate Physics II
___( )___________________________
___( )___________________________
___( )___________________________

Chemistry Requirements 42 cr

___(CHM) 121 Chemical Bonding (3 cr)
___(CHM) 123 Lab IA (2 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 124 Lab IIA (2 cr)
___(CHM) 221 Modern Organic Chemistry I (3 cr)
___(CHM) 225 Lab IIIB (1 cr)
___(CHM) 222 Modern Organic Chemistry II (3 cr)
___(CHM) 226 Lab IVB (1 cr)
___(CHM) 301 Biochemistry I (3 cr)
___(CHM) 420 Biochemistry II (3 cr)
___(CHM) 421 Biochemistry Lab (1 cr)
___(CHM) 361 Physical Chemistry I (4 cr)
___(CHM) 362 Physical Chemistry II (4 cr)
___(CHM) 371 Analytical Chemistry (4 cr)
___(CHM) 381 Advanced Inorganic Chemistry (4 cr)
___(CHM) 312, 313, 314, OR 315 Chemistry Seminar (1 cr)

Math Requirement 8 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *

Physics Requirement 8 cr

___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr) *

Biology Requirements 11-13 cr

___(BIO) 106 Principles of Biology (4 cr) *
Choose a minimum of two:
___(BIO) 220 Microbiology (3 cr)
___(BIO) 260 Genetics (3 cr)
___(BIO) 385 Cell Biology (3 cr)

Choose one if only two chosen above:
___(BIO) 255 Plant Physiology (3 cr)
___(BIO) 351 Animal Physiology (3 cr)
___(BIO) 409 Immunology (3 cr)
___(BIO) 485 Biological Electronmicroscopy (3 cr)

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

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GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	CHM 121 Chemical Bonding and Lab IA MAT 211 Calculus I
Semester II	CHM 122 Chemical Dynamics and Lab IIA MAT 212 Calculus II
Semester III	PHY 205 Intermediate Physics I CHM 221 Modern Organic Chem I & Lab IIIB
Semester IV	PHY 206 Intermediate Physics II CHM 222 Mod Organic Chem II & Lab IVB

CHEMISTRY - HEALTH SCIENCES TRACK-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I (Pre-Calculus may need to be taken first)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
___( )____________________________
___(PHY) 205 Intermediate Physics
___(BIO) 106 Principles of Biology

D: Political, Economic & Geographic Science (6 cr)
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___( )____________________________
___( )____________________________

III. General Education Electives 12 cr

___(PHY) 206 Intermediate Physics II
___( )__________________________
___( )__________________________
___( )__________________________

Chemistry Requirements 39 cr

___(CHM) 121 Chemical Bonding (3 cr)
___(CHM) 123 Lab IA (2 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 124 Lab IIA (2 cr)
___(CHM) 221 Modern Organic Chemistry I (3 cr)
___(CHM) 223 Lab IIIA (2 cr)
___(CHM) 222 Modern Organic Chemistry II (3 cr)
___(CHM) 224 Lab IVA (2 cr)
___(CHM) 301 Biochemistry I (3 cr)
___(CHM) 361 Physical Chemistry I (4 cr)
___(CHM) 362 Physical Chemistry II (4 cr)
___(CHM) 371 Analytical Chemistry (4 cr)
___(CHM) 381 Advanced Inorganic Chemistry (4 cr)

Math Requirement 8 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *

Physics Requirement 8 cr

___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr) *

Biology Requirements 16 cr

___(BIO) 106 Principles of Biology (4 cr) *
___(BIO) 110 Zoology
___(BIO) 220 Microbiology (3 cr)
___(BIO) 260 Genetics (3 cr)
___(BIO) 385 Cell Biology (3 cr)

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	CHM 121 Chemical Bonding and Lab IA MAT 211 Calculus I
Semester II	CHM 122 Chemical Dynamics and Lab IIA MAT 212 Calculus II BIO 106 Principles of Biology
Semester III	PHY 205 Intermediate Physics I CHM 221 Modern Organic Chem I & Lab IIIA
Semester IV	PHY 206 Intermediate Physics II CHM 222 Mod Organic Chem II & Lab IVA

BEST COPY AVAILABLE

CHEMISTRY - MEDICAL TECHNOLOGY TRACK-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I (Pre-Calculus may need to be taken first)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )_______________________
___( )_______________________
___( )_______________________

C: Biological & Physical Sciences (9 cr)
___( ) _______________________
___(PHY) 205 Intermediate Physics
___(BIO) 106 Principles of Biology

D: Political, Economic & Geographic Science (6 cr)
___( )_______________________
___( )_______________________

E: Social & Behavioral Science (6 cr)
___( )_______________________
___( )_______________________

III. General Education Electives 12 cr

___(PHY) 206 Intermediate Physics II
___(CPS) Computer Science
___( )_______________________
___( )_______________________

Chemistry Requirements 36 cr

___(CHM) 121 Chemical Bonding (3 cr)
___(CHM) 123 Lab IA (2 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 124 Lab IIA (2 cr)
___(CHM) 221 Modern Organic Chemistry I (3 cr)
___(CHM) 223 Lab IIIA (2 cr)
___(CHM) 222 Modern Organic Chemistry II (3 cr)
___(CHM) 224 Lab IVA (2 cr)
___(CHM) 361 Physical Chemistry I (4 cr)
___(CHM) 362 Physical Chemistry II (4 cr)
___(CHM) 371 Analytical Chemistry (4 cr)
___(CHM) 381 Advanced Inorganic Chemistry (4 cr)

Math Requirement 8 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *

Physics Requirement 8 cr

___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr) *

Biology Requirements 22 cr

___(BIO) 106 Principles of Biology (4 cr) *
___(BIO) 110 Zoology (3 cr)
___(BIO) 220 Microbiology (3 cr)
___(BIO) 260 Genetics (3 cr)
___(BIO) 220 Microbiology (3 cr)
___(BIO) 324 Pathogenic Microbiology (3 cr)
___(BIO) 317 Parasitology (3 cr)
OR
___(BIO) 350 Human Physiology (3 cr)
___(CHM) 301 Biochemistry (3 cr)

Computer Science Requirements 3 or 4 cr

___(CPS) 240 Intro to FORTRAN Programming (3 cr) *
OR
___(CPS) 246 Structured Computer Programming (4 cr) *

Free Electives 8 cr

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Semester I	CHM 121 Chemical Bonding and Lab IA MAT 211 Calculus I
Semester II	CHM 122 Chemical Dynamics and Lab IIA MAT 212 Calculus II BIO 106 Principles of Biology
Semester III	PHY 205 Intermediate Physics I CHM 221 Modern Organic Chem I & Lab IIIA BIO 110 Zoology
Semester IV	PHY 206 Intermediate Physics II CHM 222 Mod Organic Chem II & Lab IVA

CHEMISTRY-B.S.Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I (Pre-Calculus may need to be taken first)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

C: Biological & Physical Sciences (9 cr)
___( )___________________________
___(PHY) 205 Intermediate Physics
___(BIO) 106 Principles of Biology

D: Political, Economic & Geographic Science (6 cr)
___( )___________________________
___( )___________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___( )___________________________

III. General Education Electives 12 cr

___(PHY) 206 Intermediate Physics II
___( )___________________________
___( )___________________________
___( )___________________________

Chemistry Requirements 32 cr

___(CHM) 121 Chemical Bonding (3 cr)
___(CHM) 123 Lab IA (2 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 124 Lab IIA (2 cr)
___(CHM) 221 Modern Organic Chemistry I (3 cr)
___(CHM) 223 Lab IIIA (2 cr)
___(CHM) 222 Modern Organic Chemistry II (3 cr)
___(CHM) 224 Lab IVA (2 cr)
___(CHM) 361 Physical Chemistry I (4 cr)
___(CHM) 362 Physical Chemistry II (4 cr)
___(CHM) 371 Analytical Chemistry (4 cr)
OR
(CHM) 381 Advanced Inorganic Chemistry (4 cr)

Psychology Requirement 3 cr

___(PSY) 101 General Psychology (3 cr) *

Physics Requirement 8 cr

___(PHY) 205 Intermediate Physics I (4 cr) *
___(PSY) 206 Intermediate Physics II (4 cr) *

Biology Requirement

___(BIO) 106 Principles of Biology (4 cr) 4 cr

Math Requirement 8 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *

Professional Education Requirements 27 cr

___(TCH) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)

___(EDU) 340 Teaching Science In Secondary Schools (3 cr)
___(EDU) 341 Curriculum & Evaluation in the Secondary Science Classroom (3 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements 120+ cr

* * *

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Semester I	CHM 121 Chemical Bonding and Lab IA MAT 211 Calculus I
Semester II	CHM 122 Chemical Dynamics and Lab IIA MAt 212 Calculus II
Semester III	PHY 205 Intermediate Physics I CHM 221 Modern Organic Chem I & Lab IIIA
Semester IV	PHY 206 Intermediate Physics II CHM 222 Mod Organic Chem II & Lab IVA

American Chemical Society Certification available.
See Department Chairperson for details.

COMMUNICATION ARTS-B.S. Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Any math listed under Category A of the Gen Ed program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___( )______________________________

III. General Education Electives 12 cr

Communication Major Requirements 24 cr

CORE COURSES
___(ENG) 105 Literary Analysis (3 cr)
___(ENG) 209 Advanced Composition (3 cr)
___(ENG) 223 Grammars of English (3 cr)
___( ) One Survey Course (3 cr)
___(RDG) 329 Reading in the Content Areas (3 cr)
___(SPE) 121 Introduction to Theater (3 cr)
___(SPE) 255 Speech Criticism (3 cr)
___( ) One course in speech performance-i.e. Public Speaking, Discussion, Oral Interpretation or Debate. (3 cr)

Two of the following five concentrations must be selected:
(One MUST be in Speech or Writing)
Speech, Writing, Literature, Theater, Non-Print

SEE CATALOG FOR COURSE OPTIONS

Required Concentration: 3 cr
___( )______________________________(3 cr)

Elective Concentration: 3-9 cr
(3 cr if Speech, Writing or Literature;
6 cr if Theater; 9 cr if Non-Print)
___( )______________________________(3 cr)
___( )______________________________(3 cr)
___( )______________________________(3 cr)

Supplemental Block 3-9 cr

Credits are dependant on concentration chosen as follows:
Speech & Writing (9 cr)
Speech & Literature (9 cr)
Speech & Theater (6 cr)
Speech & Non-Print (3 cr)
Writing & Literature (9 cr)
Writing & Theater (6 cr)
Writing & Non-Print (3 cr)
___( )______________________________(3 cr)
___( )______________________________(3 cr)
___( )______________________________(3 cr)

Psychology Requirement 3 cr

___(PSY) General Psychology (3 cr) *
***Fulfills General Education Credit(s)**

Free Elective 6 cr

___( )______________________________(3 cr)
___( )______________________________(3 cr)

Professional Certification Requirements 27 cr

___(TCH) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)
___(EDU) 321 Methods of Teaching of English I (3 cr)
___(EDU) 322 Methods of Teaching of English II (3 cr)
___(EDU) 390 Student Teaching (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Year 1 ENG 105 Literary Analysis
SPE 121 Intro to Theater

COMMUNICATIONS/JOURNALISM DEPARTMENT TRANSFER POLICY

The Communications/Journalism department has approved the following transfer policies effective September 1, 1989:

I. General Communications/Journalism policy--the Communications/Journalism department has set the optimum enrollment of Communications/Journalism students at 380, with an optimum enrollment in each professional emphasis area as follows: News Editing (90); Public Relations (200); and Radio/TV (90).

II. Policy for all Shippensburg University students transferring into the Communications/Journalism department:

1. During the first week of each semester, the Communications/Journalism department will information Shippensburg University students, that, if they have at least a 2.3 overall grade point average, they may seek admission into the Communications/Journalism major by completing a department application form which will include such information as name, social security number, present major, current grade point average, and choice of professional emphasis area. Students will also be required to submit a current transcript and course schedule sheet.

2. At the end of the first three (3) weeks of each semester, the Communications/Journalism department will administer a departmental writing exam. The Communications/Journalism faculty will then evaluate candidates based on the results of the writing exam as well as their current grade point average, and place students in rank order. The Communications/Journalism department will then select students to fill the optimum enrollment in the Communications/Journalism major, while also meeting the optimum enrollment criteria for each professional emphasis area.

3. At the end of the first five (5) weeks, the Communications/Journalism department will notify students selected based on the above criteria that they may officially apply for transfer into the Communications/Journalism major.

4. Assuming that transfer forms are completed before the scheduling period, the new Communications/Journalism majors will be allowed to schedule for the next semester.

5. Other students inquiring about transferring into the Communications/Journalism department will be told to follow the above procedure during the next selection period, which will be the first five (5) weeks of the coming semester.

III. Policies affecting current Communications/Journalism majors.

1. Once a student has selected a professional emphasis area, he or she will NOT be able to transfer to another area unless there is an opening in that emphasis, the students has a grade point average of at least a 2.3, and permission of the department chairperson is obtained.

2. Students who are not in the Public Relations professional emphasis core will not be able to take the Public Relations core courses COM380 Public Relations, COM381 Institutional Publications, or COM290 Advertising Copywriting, due to the high enrollment in that area.

Source: Waltermyer, P., Chairperson, Communications/Journalism Department. Shippensburg University, Shippensburg, Pennsylvania, May, 1991.

EXAMPLE

APPLICATION FOR TRANSFER TO COMMUNICATION/JOURNALISM DEPT.

Name ______________________________

Social
Security No. ______________________

Campus Address ____________________

Telephone No. _____________________

Current GPA _______________________

Current Major _____________________

Number your choice of
professional emphasis (1-3)
with 1 being your first choice

_____ News Editing

_____ Public Relations

_____ Radio/TV

Students must attach a copy of their most recent transcript and a copy of their current class schedule.

DO NOT COMPLETE THIS SECTION
(For Department Use)

______ Date Completed Application Received

______ Date Notified of Test

______ Test Score

ACTION TAKEN:

______ Date Admitted to Professional Emphasis

____

______ Date Admissions Denied

EXAMPLE

Dear Applicant,

On ____________________________ you applied for admission to the Communications/ Journalism Department. To be considered for admission, you must take a writing test.

The test will consist of multiple choice and editing questions on grammar, diction, spelling and punctuation. Students will also be asked to write a short essay on an assigned topic. The test will be held on

________________ from _______ to _______ in ____________________________.

There will be no make-up tests. The test will not be given again until next semester.

Please bring your student identification card and several pencils to the exam.

COMMUNICATION JOURNALISM / NEWS-EDITORIAL B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
(MAT) 102 Introduction to Statistics OR (MAT) 170 Elem Stats for Social Science OR (MAT) 105 Math for Liberal Studies
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________
___( )______________________
___( )______________________

C: Biological & Physical Sciences (9 cr)
___( )______________________
___( )______________________
___( )______________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________
___( )______________________

E: Social & Behavioral Science (6 cr)
___( )______________________
___( )______________________

III. General Education Electives 12 cr

Theory and Writing Core Requirements 9 cr

(All must be completed with a grade of "C" or better BEFORE any Professional Emphasis courses or Comm/Journ. Electives are taken)

___(COM) 211 Introduction to Mass Communication (3 cr)
___(COM) 212 Media Writing (3 c)
___(COM) 214 History of Mass Communication (3 cr)

Professional Emphasis Core-News-Editorial 9 cr

___(COM) 285 News Writing and Reporting (3 cr)
___(COM) 293 News Editing (3 cr)
___(COM) 375 Public Affairs Reporting (3 cr)

Required Core Course 3 cr

This course to be taken after Core and Professional Emphasis courses are completed with a "C" or better grade in each course.

___(COM) 320 Communication Law and Ethics (3 cr)

Communication/Journalism Electives 12 cr

Choose 4 courses from list below:

___(COM) 331 Radio Production and Performance (3 cr)
___(COM) 335 Broadcast Adv. & Sales (3 cr)
___(COM) 338 Broadcast Mgt. & Regulation (3 cr)
___(COM) 341 Communication Thru Media (3 cr)
(If taken, do not take COM 360)
___(COM) 355 Radio Broadcast Seminar (3 cr)
___(COM) 360 Introduction to Photography (3 cr)
(If taken, do not take COM 341)
___(COM) 362 Advanced Photography (3 cr)
___(COM) 367 Multi-Media Production (3 cr)
___(COM) 370 Television Production (3 cr)
___(COM) 372 TV Criticism and Announcing (3 cr)
___(COM) 374 The TV Documentary (3 cr)
___(COM) 376 Feature Writing (3 cr)
___(COM) 377 Science Writing (3 cr)
___(COM) 393 Selected Topics ion Journalism (3 cr)
___(COM) 395 Internship (3 cr)
___(COM) 400 Public Relations Writing (3 cr)
___(COM) 416 Current Issues in Mass Communication (3 cr)
___(COM) 421 Television Workshop (3 cr)
___(COM) 426 Telecommunication Systems (3 cr)
___(COM) 436 World Broadcasting Systems (3 cr)
___(COM) 450 Radio and TV News (3 cr)
___(COM) 451 Electronic News Gathering & Field Prod.(3 cr)
___(COM) 455 TV News Production (3 cr)
___(COM) 460 Case Study in Public Relations (3 cr)

Public Relations Core Choices
___(COM) 380 Public Relations (3 cr)
___(COM) 381 Institutional Publications (3 cr)
___(COM) 290 Advertising Copy Writing (3 cr)

Radio/Television Core Choices
___(COM) 224 Writing for Broadcast Media (3 cr)
___(COM) 231 Broadcasting in America (3 cr)
___(COM) 325 Current Strategies in Broadcast Programming (3 cr)

Interdisciplinary Electives 27 cr

Interdisciplinary concentration requirement-15 cr (All 15 cr from one college department) OR minor-(18 cr) accepted.

AND

9 or 12 additional elective credits (from any department) to total 27.

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.3

Student must apply to the Communications/Journalism Department for Admission and participate in the Departmental Writing Exam. Admission is selective and students will be notified by the Department. See Transfer Policy for details.

Recommended Sequence of Courses:

Semester I or II COM 211 Intro. to Mass Communication

Only current majors are permitted to registerfor other Communication/Journalism courses.

Good writing skills are needed in this major and students are encouraged to take courses that will enhance these skills.

COMMUNICATION JOURNALISM / PUBLIC RELATIONS-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

- ___(ENG) 101 English Composition OR
  (ENG) 110 Advanced Placement English (3 cr)
  Student may need to take (ENG) 100 Basic Writing first, based on test results.
- ___(SPE) 100 Basic Oral Communication (3 cr)
- ___Mathematical Competency-Recommended
  (MAT) 102 Introduction to Statistics OR (MAT) 170 Elem Stats for Social Science OR (MAT) 105 Math for Liberal Studies
- ___(HIS) 105 World History I (3 cr) AND
- ___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )____________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________
___( )____________________
___( )____________________

C: Biological & Physical Sciences (9 cr)
___( )____________________
___( )____________________
___( )____________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________
___( )____________________

E: Social & Behavioral Science (6 cr)
___( )____________________
___( )____________________

III. General Education Electives 12 cr

Theory and Writing Core Requirements 9 cr

(All must be completed with a grade of "C" or better BEFORE any Professional Emphasis courses or Comm/Journ. Electives are taken)

___(COM) 211 Introduction to Mass Communication (3 cr)
___(COM) 212 Media Writing (3 c)
___(COM) 214 History of Mass Communication (3 cr)

Professional Emphasis Core-Public Relations 9 cr

___(COM) 380 Public Relations (3 cr)
___(COM) 381 Institutional Publications (3 cr)
___(COM) 290 Advertising Copy Writing (3 cr)

Required Core Course 3 cr

This course to be taken after Core and Professional Emphasis courses are completed with a "C" or better grade in each course.

___(COM) 320 Communication Law and Ethics (3 cr)

Communication/Journalism Electives 12 cr

Choose 4 courses from list below:

___(COM) 331 Radio Production and Performance (3 cr)
___(COM) 335 Broadcast Adv. & Sales (3 cr)
___(COM) 338 Broadcast Mgt. & Regulation (3 cr)
___(COM) 341 Communication Thru Media (3 cr)
(If taken, do not take COM 360)
___(COM) 355 Radio Broadcast Seminar (3 cr)
___(COM) 360 Introduction to Photography (3 cr)
(If taken, do not take COM 341)
___(COM) 362 Advanced Photography (3 cr)
___(COM) 367 Multi-Media Production (3 cr)
___(COM) 370 Television Production (3 cr)
___(COM) 372 TV Criticism and Announcing (3 cr)
___(COM) 374 The TV Documentary (3 cr)
___(COM) 376 Feature Writing (3 cr)
___(COM) 377 Science Writing (3 cr)
___(COM) 393 Selected Topics in Journalism (3 cr)
___(COM) 395 Internship (3 cr)
___(COM) 400 Public Relations Writing (3 cr)
___(COM) 416 Current Issues in Mass Communication (3 cr)
___(COM) 421 Television Workshop (3 cr)
___(COM) 426 Telecommunication Systems (3 cr)
___(COM) 436 World Broadcasting Systems (3 cr)
___(COM) 450 Radio and TV News (3 cr)
___(COM) 451 Electronic News Gathering & Field Prod.(3 cr)
___(COM) 455 TV News Production (3 cr)
___(COM) 460 Case Study in Public Relations (3 cr)

Public Relations Core Choices
___(COM) 380 Public Relations (3 cr)
___(COM) 381 Institutional Publications (3 cr)
___(COM) 290 Advertising Copy Writing (3 cr)

Radio/Television Core Choices
___(COM) 224 Writing for Broadcast Media (3 cr)
___(COM) 231 Broadcasting in America (3 cr)
___(COM) 325 Current Strategies in Broadcast Programming (3 cr)

Interdisciplinary Electives 27 cr

Interdisciplinary concentration requirement-15 cr (All 15 cr from one college department) OR minor-(18 cr) accepted.

AND

9 or 12 additional elective credits (from any department) to total 27.

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.3

Student must apply to the Communications/Journalism Department for Admission and participate in the Departmental Writing Exam. Admission is selective and students will be notified by the Department. See Transfer Policy for details.

Recommended Sequence of Courses:

Semester I or II COM 211 Intro. to Mass Communication

Only current majors are permitted to registerfor other Communication/Journalism courses.

Good writing skills are needed in this major and students are encouraged to take courses that will enhance these skills.

COMMUNICATION JOURNALISM / RADIO-TELEVISION B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
(MAT) 102 Introduction to Statistics OR (MAT) 170 Elem Stats for Social Science OR (MAT) 105 Math for Liberal Studies
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Theory and Writing Core Requirements 9 cr

(All must be completed with a grade of "C" or better BEFORE any Professional Emphasis courses or Comm/Journ. Electives are taken)
___(COM) 211 Introduction to Mass Communication (3 cr)
___(COM) 212 Media Writing (3 c)
___(COM) 214 History of Mass Communication (3 cr)

Professional Emphasis Core-Radio/Television 9 cr

___(COM) 224 Writing for Broadcast Media (3 cr)
___(COM) 231 Broadcasting in America (3 cr)
___(COM) 325 Current Strategies in Broadcast Programming (3 cr)

Required Core Course 3 cr

This course to be taken after Core and Professional Emphasis courses are completed with a "C" or better grade in each course.
___(COM) 320 Communication Law and Ethics (3 cr)

Communication/Journalism Electives 12 cr

Choose 4 courses from list below:
___(COM) 331 Radio Production and Performance (3 cr)
___(COM) 335 Broadcast Adv. & Sales (3 cr)
___(COM) 338 Broadcast Mgt. & Regulation (3 cr)
___(COM) 341 Communication Thru Media (3 cr)
(If taken, do not take COM 360)
___(COM) 355 Radio Broadcast Seminar (3 cr)
___(COM) 360 Introduction to Photography (3 cr)
(If taken, do not take COM 341)
___(COM) 362 Advanced Photography (3 cr)
___(COM) 367 Multi-Media Production (3 cr)
___(COM) 370 Television Production (3 cr)
___(COM) 372 TV Criticism and Announcing (3 cr)
___(COM) 374 The TV Documentary (3 cr)
___(COM) 376 Feature Writing (3 cr)
___(COM) 377 Science Writing (3 cr)
___(COM) 393 Selected Topics ion Journalism (3 cr)
___(COM) 395 Internship (3 cr)
___(COM) 400 Public Relations Writing (3 cr)
___(COM) 416 Current Issues in Mass Communication (3 cr)
___(COM) 421 Television Workshop (3 cr)
___(COM) 426 Telecommunication Systems (3 cr)
___(COM) 436 World Broadcasting Systems (3 cr)
___(COM) 450 Radio and TV News (3 cr)
___(COM) 451 Electronic News Gathering & Field Prod.(3 cr)
___(COM) 455 TV News Production (3 cr)
___(COM) 460 Case Study in Public Relations (3 cr)
Public Relations Core Choices
___(COM) 380 Public Relations (3 cr)
___(COM) 381 Institutional Publications (3 cr)
___(COM) 290 Advertising Copy Writing (3 cr)
Radio/Television Core Choices
___(COM) 224 Writing for Broadcast Media (3 cr)
___(COM) 231 Broadcasting in America (3 cr)
___(COM) 325 Current Strategies in Broadcast Programming (3 cr)

Interdisciplinary Electives 27 cr

Interdisciplinary concentration requirement-15 cr (All 15 cr from one college department) OR minor-(18 cr) accepted.

AND

9 or 12 additional elective credits (from any department) to total 27.

Total Graduation Requirements 120 cr

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GPA Needed to Declare: 2.3

Student must apply to the Communications/Journalism Department for Admission and participate in the Departmental Writing Exam. Admission is selective and students will be notified by the Department. See Transfer Policy for details.

Recommended Sequence of Courses:

Semester I or II COM 211 Intro. to Mass Communication

Only current majors are permitted to registerfor other Communication/Journalism courses.

Good writing skills are needed in this major and students are encouraged to take courses that will enhance these skills.

COMPUTER SCIENCE – COMPUTER BASED INFORMATION SYSTEMS TRACK-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___(MAT) 211 Calculus I (3 cr) If necessary, student may need to take Pre-Calc first.
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II (4 cr)

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________
___( )____________________
___( )____________________

C: Biological & Physical Sciences (9 cr)
___( )____________________
___( )____________________
___( )____________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________
___( )____________________

E: Social & Behavioral Science (6 cr)
___( )____________________
___( )____________________

III. General Education Electives 12 cr

Information Systems Requirements 24 cr

___(ACC) 201 Managerial Accounting (3 cr)
OR
(BUS) 220 American Business Systems (3 cr)
AND
___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(BIS) 243 Business Programming (3 cr)
___(BIS) 344 Business Systems Analysis and Design (3 cr)
___(CPS) 305 Software Design for Information Systems (3 cr)
___(CPS) 446 Intro to Data Base Management Systems (3 cr)
___(CPS) 447 Advanced Systems Concepts I (3 cr)
___(PHL) 301 Logic (3 cr)

Mathematics Requirement 18 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *
___(MAT) 225 Discrete Mathematics (3 cr)
___(MAT) 310 Statistical Inference & Probability (3 cr)

Computer Science Requirements 22 cr

___(CPS) 246 Structured Computer Programming (4 cr)
___(CPS) 247 Data Structures (3 cr)
___(CPS) 256 Computer Organization & Programming (3 cr)
___(CPS) 257 Computer Systems Concepts (3 cr)
___(CPS) 260 Intro to File Processing (3 cr)
___(CPS) 315 Advanced Data Structures (3 cr)
___(CPS) 330 Discrete Structures for Computer Scientists (3 cr)

Computer Science Electives 9 cr

Electives 300 Level or Above
___(CPS) ____________________(3cr)
___(CPS) ____________________(3cr)
___(CPS) ____________________(3cr)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s).

* * *

GPA Needed to Declare: 2.0

Student must have completed Calculus I and Structured Computer Programming with a grade of "C" or better.

Recommended Sequence of Courses:

Semester I	MAT 211 Calculus I (4 cr) CPS 246 Structured Computer Prog. (4 cr)
	NOTE: Recommended Course Load 14 credits
Semester II	MAT 212 Calculus II (4 cr) CPS 247 Data Structures (3 cr)
	NOTE: Recommended Course Load 16 credits
Semester III	MAT 225 Discrete Mathematics (3 cr) CPS 256 Computer Organization & Prog. (3 cr) BIS 243 Business Programming (3 cr) PHL 301 Logic (3 cr)
Semester IV	CPS 330 Discrete Struct./Computer Sci. (3 cr) CPS 257 Computer Systems Concepts (3 cr) CPS 260 Intro to File Processing (3 cr)

COMPUTER SCIENCE – SCIENTIFIC PROGRAMMING TRACK-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___(MAT) 211 Calculus I (3 cr) If necessary, student may need to take Pre-Calc first.
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II (4 cr)

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___(PHY) 205 Intermediate Physics I
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Scientific Programming Track 20 cr

___(BIS) 243 Business Programming (3 cr)
___(CPS) 340 Advanced Fortran Programming (3 cr)
___(CPS) 460 Intro to Computer Graphics (3 cr)
___(PHL) 301 Logic (3 cr)
___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr)

Mathematics Requirement 24 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *
___(MAT) 213 Calculus III (4 cr)
___(MAT) 223 Differential Equations (3 cr)
___(MAT) 225 Discrete Mathematics (3 cr)
___(MAT) 410 Numerical Analysis I (3 cr)
___(MAT) 310 Statistical Inference & Probability (3 cr)

Computer Science Requirements 22 cr

___(CPS) 246 Structured Computer Programming (4 cr)
___(CPS) 247 Data Structures (3 cr)
___(CPS) 256 Computer Organization & Programming (3 cr)
___(CPS) 257 Computer Systems Concepts (3 cr)
___(CPS) 260 Intro to File Processing (3 cr)
___(CPS) 315 Advanced Data Structures (3 cr)
___(CPS) 330 Discrete Structures for Computer Scientists (3 cr)

Computer Science Electives 9 cr

Electives 300 Level or Above
___(CPS) ______________________(3cr)
___(CPS) ______________________(3cr)
___(CPS) ______________________(3cr)

Total Graduation Requirements 120 cr

***Major requirement fulfills General Education credit(s).**

****

GPA Needed to Declare: 2.0

Student must have completed Calculus I and Structured Computer Programming with a grade of "C" or better.

Recommended Sequence of Courses:

Semester I	MAT 211 Calculus I (4 cr) CPS 246 Structured Computer Prog. (4 cr)
	NOTE: Recommended Course Load 14 credits
Semester II	MAT 212 Calculus II (4 cr) CPS 247 Data Structures (3 cr)
	NOTE: Recommended Course Load 16 credits
Semester III	MAT 225 Discrete Mathematics (3 cr) CPS 256 Computer Organization & Prog. (3 cr) BIS 243 Business Programming (3 cr) PHL 301 Logic (3 cr)
Semester IV	CPS 330 Discrete Structures/Comp. Sci.(3 cr) CPS 257 Computer Systems Concepts (3 cr) CPS 260 Intro to File Processing (3 cr)

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COMPUTER SCIENCE – SYSTEMS PROGRAMMING TRACK-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___(MAT) 211 Calculus I (3 cr) If necessary, student may need to take Pre-Calc first.
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II (4 cr)

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________
___( )______________________
___( )______________________

C: Biological & Physical Sciences (9 cr)
___(PHY) 205 Intermediate Physics I
___( )______________________
___( )______________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________
___( )______________________

E: Social & Behavioral Science (6 cr)
___( )______________________
___( )______________________

III. General Education Electives 12 cr

Systems Programming Track 21 cr

___(BIS) 243 Business Programming (3 cr)
___(CPS) 321 Programming Languages (3 cr)
___(CPS) 446 Intro to Data Base Management Systems (3 cr)
___(CPS) 447 Advanced Systems Concepts I (3 cr)
___(CPS) 448 Advanced Systems Concepts II (3 cr)
___(PHL) 301 Logic (3 cr)
___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr)

Mathematics Requirement 14 cr

__(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *
___(MAT) 225 Discrete Mathematics (3 cr)
___(MAT) 310 Statistical Inference & Probability (3 cr)

Computer Science Requirements 22 cr

___(CPS) 246 Structured Computer Programming (4 cr)
___(CPS) 247 Data Structures (3 cr)
___(CPS) 256 Computer Organization & Programming (3 cr)
___(CPS) 257 Computer Systems Concepts (3 cr)
___(CPS) 260 Intro to File Processing (3 cr)
___(CPS) 315 Advanced Data Structures (3 cr)
___(CPS) 330 Discrete Structures for Computer Scientists (3 cr)

Computer Science Electives 9 cr

300 Level or Above
___(CPS) ______________________(3cr)
___(CPS) ______________________(3cr)
___(CPS) ______________________(3cr)

Total Graduation Requirements 120 cr

***Major requirement fulfills General Education credit(s).**

GPA Needed to Declare: 2.0

Student must have completed Calculus I and Structured Computer Programming with a grade of "C" or better.

Recommended Sequence of Courses:

Semester I MAT 211 Calculus I (4 cr)
CPS 246 Structured Computer Prog. (4 cr)

NOTE: Recommended Course Load 14 credits

Semester II MAT 212 Calculus II (4 cr)
CPS 247 Data Structures (3 cr)

NOTE: Recommended Course Load 16 credits

Semester III MAT 225 Discrete Mathematics (3 cr)
CPS 256 Computer Organization & Prog.(3 cr)
BIS 243 Business Programming (3 cr)
PHL 301 Logic (3 cr)

Semester IV CPS 330 Discrete Structures/Comp. Sci.(3 cr)
CPS 256 Computer Systems Concepts (3 cr)
CPS 260 Intro to File Processing (3 cr)

EARTH-SPACE & GENERAL SCIENCE B.S.Ed.
With Environmental Education Certification Option

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-(MAT) 102 Introduction to Statistics OR (MAT) 124 Pre-Calculus are minimum levels.
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
Note course options under MAT and CPS
____( )____________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
Note course options under CHM, PHY, BIO
___( )____________________________
___( )____________________________
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___( )____________________________
___( )____________________________

III. General Education Electives 12 cr

Required Earth Science Courses 15 cr

___(ESS) 210 Physical Geology (3 cr)
___(ESS) 212 Historical Geology (3 cr)
___(ESS) 220 Oceanography (3 cr)
___(ESS) 325 Astronomy (3 cr)
___(ESS) 355 Meteorology (3 cr)

Earth Science Electives 15 cr

Select 5 courses:
___(ESS) 108 Conservation of Natural Resources (3 cr)
___(ESS) 304 Applied Meteorology & Climatology (3 cr)
___(ESS) 214 Geology of National Parks (3 cr)
___(ESS) 413 Mineral & Rock Resources (3 cr)
___(ESS) 442 Environmental Geology (3 cr)
___(GEO) 203 Climatology (3 cr)
___(GEO) 222 Map & Air Photo Analysis (3 cr)
___(GEO) 224 Soils (3 cr)
___(GEO) 226 Hydrology (3 cr)
___(GEO) 397 Introduction to Research (3 cr)
___(GEO) 440 Field Techniques (3 cr)
___(GEO) 444 Environmental Land Use Planning (3 cr)
___(GEO) 445 Remote Sensing (3 cr)
___Marine Science Consortium Courses (1-6 cr)
___Planetarium Direction (3 cr)

Biology Requirement * 9 cr

Select 3 courses:
___(BIO) 106 Principles of Biology (4 cr)
___(BIO) 140 Introduction to Ecology (3 cr)
___(BIO) 145 Problems of the Environment (3 cr)
___(BIO) 148 Field and Natural History (3 cr)
___(BIO) 240 General Ecology (3 cr)
___(BIO) 411 Ornithology (3 cr)
___(BIO) 448 Diversity of Vascular Plants (3 cr)

Chemistry Requirement * 8 cr

___(CHM) 121 Chemical Bonding (3 cr)
___(CHM) 125 Lab IB (1 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 126 Lab IIB (1 cr)

Physics Requirement * 8 cr

___(PHY) 121 Introduction to Physics I (4 cr)
___(PHY) 122 Introduction to Physics II (4 cr)

Math and Computer Science Requirement * 6-9 cr

___(MAT) 102 Introduction to Statistics (3 cr)
___(MAT) 124 Pre-Calculus (3 cr)
___(MAT) 211 Calculus I (4 cr)
___(MAT) 212 Calculus II (4 cr)
___(CPS) 105 Computer Science for Liberal Studies (3 cr)
___(CPS) 240 Intro. to Fortran Programming (3 cr)
___(CPS) 246 Structured Computer Programming (4 cr)

Professional Education Requirements 27 cr

___(TCH) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)

The following must be taken together:
___(EDU) 340 Teaching Science In Secondary School (3 cr)
___(EDU) 341 Curriculum & Evaluation in the Secondary Science Classroom I (3 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Environmental Education Certification 3 cr

___(EDU) 410 Environmental Education Practicum (3 cr)

***Major Requirement Fulfills General Education Credit(s)**

Total Graduation Requirements **120+ cr**

◆◆

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Year I ESS 210 Physical Geology
Second Core Course
Biology

ENGLISH-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
(MAT) 102 Introduction to Statistics OR (MAT) 105 Math for Liberal Studies
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )____________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________
___( )____________________
___( )____________________

C: Biological & Physical Sciences (9 cr)
___( )____________________
___( )____________________
___( )____________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________
___( )____________________

E: Social & Behavioral Science (6 cr)
___( )____________________
___( )____________________

III. General Education Electives 12 cr

English Major Requirements

CORE COURSES 18 hr
___(ENG) 151 Introduction to Poetry (3 cr)
___(ENG) 105 Literary Analysis (3 cr)
___(ENG) 233 Major American Writers 1650-1865 (3 cr)
___(ENG) 234 Major American Writers 1865-1945 (3 cr)
___(ENG) 236 Major British Writers 700-1789 (3 cr)
___(ENG) 237 Major British Writers 1789-1945 (3 cr)

MULTICULTURAL LITERATURE (select one) 3 cr
___(ENG) 159 Introduction to Mythology (3 cr)
___(ENG) 245 The Woman in Literature (3 cr)
___(ENG) 246 Literature of Minorities (3 cr)
___(ENG) 275 Afro-American Literature (3 cr)

LANGUAGE (select one) 3 cr
___(ENG) 223 The Grammars of English (3 cr)
___(ENG) 301 History of the English Language (3 cr)
___(ENG) 346 Transformational Grammar (3 cr)

ADVANCED COURSE IN WRITING (select one) 3 cr
___(ENG) 209 Advanced Composition (3 cr)
___(ENG) 214 Reviewing the Arts (3 cr)
___(ENG) 307 Creative Writing: Poetry (3 cr)
___(ENG) 308 Creative Writing: Fiction (3 cr)

MAJOR AUTHORS 6 cr
Select one
___(ENG) 322 Chaucer (3 cr)
___(ENG) 353 Jane Austin (3 cr)
___(ENG) 354 T.S. Eliot (3 cr)
___(ENG) 421 Milton (3 cr)
AND
___(ENG) 330/331 Shakespeare (3 cr) (Required)

LITERARY TRADITIONS (select one) 3 cr
___(ENG) 279 Literature of the Bible (3 cr)
___(ENG) 284 The American Novel (3 cr)
___(ENG) 304 Literary Criticism (3 cr)
___(ENG) 318 The English Renaissance (3 cr)
___(ENG) 329 English Romantic Poetry & Poetics (3 cr)
___(ENG) 332 Hawthorne, Poe, & Melville (3 cr)
___(ENG) 350 The English Novel (3 cr)

MODERN & CONTEMPORY LITERATURE 3 cr
Select One
___(ENG) 247 Science Fiction (3 cr)
___(ENG) 355 The Modern Novel (3 cr)
___(ENG) 356 Modern Poetry (3 cr)
___(ENG) 357 Modern Drama (3 cr)
___(ENG) 471 Contemporary American & British Literature (3 cr)
___(ENG) 472 Contemporary World Literature (3 cr)

ENGLISH SEMINARS (select one) 3 cr
___(ENG) 467 Seminar in Drama (3 cr)
___(ENG) 468 Seminar in Fiction (3 cr)
___(ENG) 469 Seminar in Poetry (3 cr)

Free Electives 18 cr

Total Graduation Requirements 120 cr

* * *

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	ENG 151 Introduction to Poetry (cannot be counted in category B of the Gen Ed program)
Semester II	ENG 105 Literary Analysis One Core Course

Shakespeare should NOT be taken in the first 2 semesters.

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ENGLISH-B.S. Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
(MAT) 102 Introduction to Statistics OR (MAT) 105 Math for Liberal Studies
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language & Numbers for Rational Thinking (3 cr)
Fulfilled by major
__(SPE) 101 Fundamentals of the Communications Process

B: Literary, Artistic & Cultural Traditions (9 cr)
Partially fulfilled by major
___(ENG) 243 Art of the Film
___(SPE) 121 Intro to Theater
___( )____________________________

C: Biological & Physical Sciences (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___( )____________________________
___( )____________________________

III. General Education Electives 12 cr

Fulfilled by major
___(SPE) 255 Speech Criticism (3 cr)
Remainder to be taken from the Professional Certification Requirements
___(EDU)____________________________
___(EDU)____________________________
___(EDU)____________________________

English Major Requirements

CORE COURSES 18 cr
___(ENG) 151 Introduction to Poetry (3 cr)
___(ENG) 105 Literary Analysis (3 cr)
___(ENG) 233 Major American Writers 1650-1865 (3 cr)
___(ENG) 234 Major American Writers 1865-1945 (3 cr)
___(ENG) 236 Major British Writers 700-1789 (3 cr)
___(ENG) 237 Major British Writers 1789-1945 (3 cr)

MULTICULTURAL LITERATURE (select only one) 3 cr
___(ENG) 245 The Woman in Literature (3 cr)
___(ENG) 246 Literature of Minorities (3 cr)
___(ENG) 275 Afro-American Literature (3 cr)

LANGUAGE (both courses) 6 cr
___(ENG) 223 The Grammars of English (3 cr)
___(ENG) 301 History of the English Language (3 cr)
___(ENG) 346 Transformational Grammar (3 cr)

ADVANCED COURSE IN WRITING and MAJOR AUTHOR (both) 6 cr
___(ENG) 209 Advanced Composition (3 cr)
___(ENG) 330/331 Shakespeare (3 cr)

LITERARY TRADITIONS (select only one) 3 cr
___(ENG) 318 The English Renaissance (3 cr)
___(ENG) 329 English Romantic Poetry & Poetics (3 cr)
___(ENG) 350 The English Novel (3 cr)
___(ENG) 284 The American Novel (3 cr)
___(ENG) 332 Hawthorne, Poe, & Melville (3 cr)
___(ENG) 279 Literature of the Bible (3 cr)
___(ENG) 304 Literary Criticism (3 cr)
___(ENG) 159 Introduction to Mythology (3 cr)

MODERN & CONTEMPORARY LITERATURE (Select only one) 3 cr
___(ENG) 471 Contemporary American & British Lit. (3 cr)
___(ENG) 472 Contemporary World Literature (3 cr)
___(ENG) 247 Science Fiction (3 cr)
___(ENG) 355 The Modern Novel (3 cr)
___(ENG) 357 Modern Drama (3 cr)
___(ENG) 356 Modern Poetry (3 cr)

ENGLISH SEMINARS (select only one) 3 cr
___(ENG) 467 Seminar in Drama (3 cr)
___(ENG) 468 Seminar in Fiction (3 cr)
___(ENG) 469 Seminar in Poetry (3 cr)

Professional Competency 6 cr
___(RDG) 329 Reading in the Content Areas (3 cr)
___(SPE) 221 Oral Interpretation (3 cr)
OR
(SPE) 351 Public Speaking (3 cr)

Speech and Other English Requirements 12 cr
___(SPE) 101 Fund. of the Communication Process (3 cr) *
___(SPE) 121 Intro. to Theater (3 cr) *
___(ENG) 243 Art of the Film (3 cr) *
___(SPE) 255 Speech Criticism (3 cr) *

*** Major requirement fulfills General Education Credit(s)**

Professional Certification Requirements 27 cr
A total of 27 credits required - Some taken under Gen. Ed. Electives
___(TCH) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)
___(EDU) 321 Teaching of English I (3 cr)
___(EDU) 322 Teaching of English II (3 cr)
___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Total Graduation Requirements 120 + cr

*** Major requirement fulfills General Education Credit(s)**

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Semester I ENG 151 Introduction to Poetry

Semester II ENG 105 Literary Analysis
One Core Course

Shakespeare should NOT be taken in the first 2 semesters.

FRENCH-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any math listed under Category "A" in the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

French Major Requirements 21 cr

___(FRN) 200 Introduction to Reading and Translation (3 cr)
___(FRN) 202 Intermediate French Conversation (3 cr)
___(FRN) 210 Diction and Conversation (3 cr)
___(FRN) 212 French Grammar (3 cr)
___(FRN) 213 Composition and Stylistics (3 cr)
___(FRN) 225 French Civilization (3 cr)
___(FRN) 350 Readings in French Literature (3 cr)

French Electives 12 cr

___(FRN)______________________________(3cr)
___(FRN)______________________________(3cr)
___(FRN)______________________________(3cr)
___(FRN)______________________________(3cr)

Free Electives 27 cr

Total Graduation Requirements 120 cr

* * *

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

YEAR I Introductory Courses

FRENCH/ENGLISH-B.S. Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any Math listed under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

French Major Requirements 21 cr

___(FRN) 200 Introduction to Reading and Translation (3 cr)
___(FRN) 202 Intermediate French Conversation (3 cr)
___(FRN) 210 Diction and Conversation (3 cr)
___(FRN) 212 French Grammar (3 cr)
___(FRN) 213 Composition and Stylistics (3 cr)
___(FRN) 225 French Civilization (3 cr)
___(FRN) 350 Readings in French Literature (3 cr)

French Electives 12 cr

___(FRN)______________________________(3 cr)
___(FRN)______________________________(3 cr)
___(FRN)______________________________(3 cr)
___(FRN)______________________________(3 cr)

Professional Education Requirements 28-31 cr

___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)
___(EDU) 305 Applied Linguistics in Foreign Language Teaching (1 cr)
Must be taken together
___(EDU) 323 Teaching of Foreign Language I (3 cr)
___(EDU) 324 Teaching of Foreign Language II (3 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Strongly recommended:
___(RDG) 329 Reading in the Content Areas (3 cr)

Courses required for ML/English Double Certification 27 cr

___(ENG) 105 Literary Analysis (3 cr)
___(ENG) 233 Major American Writers 1650-1865 (3 cr)
___(ENG) 234 Major American Writers 1865-1945 (3 cr)
___(ENG) 236 Major British Writers 700-1789 (3 cr)
___(ENG) 237 Major British Writers 1789-1945 (3 cr)
___(ENG) 223 The Grammars of English (3 cr)
___(ENG) 209 Advanced Composition (3 cr)
___(ENG) 330 OR 331 Shakespeare (3 cr)
AND
One of the Following:
___(ENG) 467 Seminar in Drama (3 cr)
___(ENG) 468 Seminar in Fiction (3 cr)
___(ENG) 469 Seminar in Poetry (3 cr)

Electives: Strongly Recommended 6 cr

___(SPE) 255 Speech Criticism (3 cr)
___(EDU) 321 Teaching of English in Secondary Schools (3 cr)

Total Graduation Requirements 120+ cr

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GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Year 1 Any introductory language courses necessary.

FRENCH B.S. Ed.

General Education Requirements
I. Required Skills and Competencies 15 cr
___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any Math listed under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr
A: Language/Numbers for Rational Thinking (3 cr)
___( )____________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___( )____________________________
___( )____________________________

III. General Education Electives 12 cr

French Major Requirements 21 cr
___(FRN) 200 Introduction to Reading and Translation (3 cr)
___(FRN) 202 Intermediate French Conversation (3 cr)
___(FRN) 210 Diction and Conversation (3 cr)
___(FRN) 212 French Grammar (3 cr)
___(FRN) 213 Composition and Stylistics (3 cr)
___(FRN) 225 French Civilization (3 cr)
___(FRN) 350 Readings in French Literature (3 cr)

French Electives 12 cr
___(FRN)____________________________(3cr)
___(FRN)____________________________(3cr)
___(FRN)____________________________(3cr)
___(FRN)____________________________(3cr)

Professional Education Requirements 28-31 cr
___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)
___(EDU) 305 Applied Linguistics in Foreign Language Teaching (1 cr)
Must be taken together
___(EDU) 323 Teaching of Foreign Language I (3 cr)
___(EDU) 324 Teaching of Foreign Language II (3 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Strongly recommended:
___(RDG) 329 Reading in the Content Areas (3 cr)

Total Graduation Requirements 120+ cr

* * *

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Year I Any introductory language courses necessary.

GEOENVIRONMENTAL STUDIES-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Student should take the highest level of math s/he can
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )____________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
Note the course options under CHM and PHY
___( )____________________________
___( )____________________________
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___( )____________________________
___( )____________________________

III. General Education Electives 12 cr

Required GeoEnvironmental Studies Courses 13 cr

___(ESS) 210 Physical Geology (3 cr)
(If Introduction to Geology has been taken-
(ESS) 212 Historical Geology will be required) **
___(GEO) 224 Soils (3 cr)
___(GEO) 226 Hydrology (3 cr)
___(ESS) 304 Applied Meteorology & Climatology (3 cr)
___(GEO) 391 Geography Seminar (1 cr)

Geography Electives 6 cr

Systematic Courses-Choose 1
___(GEO) 314 Industrial Geography (3 cr)
___(GEO) 310 Transportation Geography (3 cr)
___(GEO) 322 Urban Geography (3 cr)

Geography/Economic-Regional-Choose 1
___(GEO) 230 Economic Geography (3 cr)
___(GEO) 244 Land Use (3 cr)
___(GEO) ANY Regional Course (3 cr)

GeoEnvironmental Complex System Electives 9 cr

Select 3 courses:
___(ESS) 413 Mineral & Rock Resources (3 cr)
___(GEO) 444 Environmental Land Use Planning (3 cr)
___(ESS) 442 Environmental Geology (3 cr)
___(GEO) 401 Energy Systems (3 cr)

Technique Course Electives 6 cr

Select 2 Courses:
___(GEO) 222 Map & Air Photo Analysis (3 cr)
___(GEO) 251 Cartography (3 cr)
___(GEO) 420 Geographic Information Systems (3 cr)
___(GEO) 430 Spatial Analysis if Geo. Data (3 cr)
___(GEO) 440 Field Techniques (3 cr)
___(GEO) 445 Remote Sensing (3 cr)
___(GEO) 453 Advanced Cartography (3 cr)

GeoEnvironmental Electives 3 cr

Select 1 course:
___(ESS) 212 Historical Geology (3 cr)
___(ESS) 214 Geology of National Parks (3 cr)
___(GEO) 203 Climatology (3 cr)
___(ESS) 220 Oceanography (3 cr)
___(ESS) 355 Meteorology (3 cr)
___(GEO) 397 Introduction to Research (3 cr)
___(GEO) 450 Geography-Geology Field Studies (3 cr)
___(GEO) 490 Selected Topics
___Marine Science Consortium Courses (3 cr)

Geoenvironmental Field Experience

___Internship (Junior Status-2.0 Required) 3 cr

Biology Requirement 9 or 10 cr

___(BIO) 106 Principles of Biology (4 cr) OR
(BIO) 100 Basic Biology (3 cr)

___(BIO) 140 Introduction to Ecology (3 cr) OR
(BIO) 240 General Ecology (3 cr)

___(BIO) 148 Field and Natural History (3 cr) OR
(BIO) 448 Diversity of Vascular Plants (3 cr)

Chemistry and/or Physics Requirement 7 or 8 cr

Choose 2 courses (Include lab where appropriate)
___(CHM) 105 Chemistry:Observational Approach (3 cr)
___(CHM) 121 Chemical Bonding (3 cr)
___(CHM) 125 Lab IB (1 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 126 Lab IIB (1 cr)
___(PHY) 121 Introduction to Physics (4 cr)

Computer Science Requirement 3 cr

Select 1 Course:
___(CPS) 105 Computer Science for Liberal Studies (3 cr)
___(CPS) 180 Microcomputer Basic (3 cr)
___(CPS) 240 Intro. to Fortran Programming (3 cr)
___(CPS) 246 Structured Computer Programming (4 cr)

Math Requirement 3 or 4 cr

Select 1 Course:
___(MAT) 102 Introduction to Statistics (3 cr)
___(MAT) 124 Pre-Calculus (3 cr)
___(MAT) 170 Statistics for Social Science (3 cr)
___(MAT) 211 Calculus I (4 cr)
___(MAT) 212 Calculus II (4 cr)

Recommended Background Courses

ESS 108 Conservation of Natural Resources (3 cr)
ESS 111 Introduction to Atmosphere (3 cr)

***Major Requirement Fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I ESS 111 Intro to Atmosphere or ESS 110 Intro to Geology
Biology Requirement
World Geography or Geo of U.S. & Canada

Semester II ESS 210 Physical Geology (if 110 not taken) **
Another Core Course or Geo Elective

Gen Eds should be completed as soon as possible

GEOGRAPHY - CARTOGRAPHY SPATIAL INFORMATION SYSTEMS TRACK-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Student should take the highest level of math s/he can.
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Required Geography Courses 16 cr

___(GEO) 105 Physical Geography (3 cr)
___(GEO) 230 Economic Geography (3 cr)
___(GEO) 251 Cartography (3 cr)
___(GEO) 322 Urban Geography (3 cr)
OR
(GEO) 244 Land Use (3 cr)
___(GEO) 391 Geography Seminar (1 cr)

Cartography Track 18 cr

Choose 2 courses:
___(GEO) 222 Map & Air Photo Analysis (3 cr)
___(GEO) 440 Field Techniques (3 cr)
___(GEO) 445 Remote Sensing (3 cr)

Choose 2 courses
___(GEO) 420 Geographic Information Systems (3 cr)
___(GEO) 430 Spacial Analysis of Geo. Data (3 cr)
___(GEO) 451 Advanced Cartography (3 cr)
AND
___(GEO) 400 Level Elective

Geography Internship

___Internship (Junior Status-2.0 Required) 3 cr

Computer Science/Math Requirement 10 cr

___(MAT) 102 Introduction to Statistics (3 cr)
___(CPS) 246 Structured Computer Programming (4 cr)
___(CPS) 150 Basic Programming (3 cr)
___(CPS) 240 Introduction to Fortran (3 cr)

Select one:
___(MAT) 170 Elementary Stat. for Social Science (4 cr)
___(MAT) 211 Calculus I (4 cr)
___(CPS) 180 Microcomputer Basic (3 cr)

For Background-Recommend the following:
___(GEO) 101 World Geography (3 cr)
OR
___(GEO) 103 Geography of the U.S. and Canada (3 cr)
OR
___(GEO) 140 Cultural Geography (3 cr)

Free Electives 10+cr

***Major Requirement Fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

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GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	GEO 101 World Geography or GEO 103 Geography of U.S. & Canada GEO 105 Physical Geography
Semester II	Core Course

General Education courses should be completed as soon as possible.

GEOGRAPHY - LAND USE TRACK-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Student should take the highest level of math s/he can.
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )____________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___( )____________________________
___( )____________________________

III. General Education Electives 12 cr

Required Geography Courses 16 cr

___(GEO) 105 Physical Geography (3 cr)
___(GEO) 230 Economic Geography (3 cr)
___(GEO) 251 Cartography (3 cr)
___(GEO) 322 Urban Geography (3 cr) OR
(GEO) 244 Land Use (3 cr)
___(GEO) 391 Geography Seminar (1 cr)
___(GEO) 444 Environmental Land Use Planning (3 cr)

Land Use Track 15 cr

Choose 5 courses:
___(ESS) 214 Geology of National Parks (3 cr)
___(ESS) 413 Mineral & Rock Resources (3 cr)
___(ESS) 442 Environmental Geology (3 cr)
___(GEO) 244 Land Use (3 cr)
___(GEO) 314 Industrial Geography (3 cr)
___(GEO) 310 Transportation Geography (3 cr)
___(GEO) 320 Historical Geography (3 cr)
___(GEO) 322 Urban Geography (3 cr)
___(GEO) 326 Political Geography (3 cr)
___(GEO) 401 Geography of Tourism (3 cr)
___(GEO) 445 Remote Sensing (3 cr)

Geography Internship

___Internship (Junior Status-2.0 Required) 3 cr

Computer Science/Math Requirement 6 cr

Select 1 Course:
___(MAT) 102 Introduction to Statistics (3 cr)
___(MAT) 170 Elementary Stat. for Social Science (3 cr)

Select 1 Course:
___(CPS) 105 Computer Science for Liberal Studies (3 cr)
___(CPS) 180 Microcomputer Basic (3 cr)
___(CPS) 246 Structured Computer Programming (4 cr)
___(CPS) 240 Introduction to FORTRAN Programming (3 cr)

Government Requirement 6 cr

Select 2 courses:
___(GOV) 203 State and Local Government (3 cr)
___(GOV) 207 Municipal Gov. & Administration (3 cr)
___(GOV) 208 Regional & Urban Planning (3 cr)
___(GOV) 413 Pennsylvania Local Government (3 cr)

Psychology Requirement 3 cr

___(PSY) 205 Research Design & Statistics for Behavioral Science (3 cr)

For Background-Recommend the following:
___(GEO) 101 World Geography (3 cr)
OR
___(GEO) 103 Geography of the U.S. and Canada (3 cr)
OR
___(GEO) 140 Cultural Geography (3 cr)

Free Electives 10+cr

***Major Requirement Pulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

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GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	GEO 101 World Geography or GEO 103 Geography of U.S. & Canada GPE 105 Physical Geography
Semester II	Core Course Government

General Education courses should be completed as soon as possible.

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GEOGRAPHY - WORLD REGIONS & TOURISM TRACK-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency
(MAT) 102 Introduction to Statistics OR
(MAT) 107 Elementary Stats. for Social Science
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
Note the course options under MAT & CPS & Language
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
Note the course options under Economics
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Required Geography Courses 16 cr

___(GEO) 105 Physical Geography (3 cr)
___(GEO) 230 Economic Geography (3 cr)
___(GEO) 251 Cartography (3 cr)
___(GEO) 322 Urban Geography (3 cr) OR
(GEO) 244 Land Use (3 cr)
___(GEO) 391 Geography Seminar (1 cr)
___(GEO) 401 Geography of Tourism (3 cr)

World Regions & Tourism Track 12 cr

Choose 4 courses:
___(ESS) 214 Geology of National Parks (3 cr)
___(GEO) 201 Geography of Latin America (3 cr)
___(GEO) 209 Geography of the Soviet Union (3 cr)
___(GEO) 213 Geog. of South & Southeast Asia (3 cr)
___(GEO) 214 Geography of East Asia (3 cr)
___(GEO) 217 Geog. of Austrialia & Oceania (3 cr)
___(GEO) 305 Geography of Europe (3 cr)
___(GEO) 306 Geography fo the Middle East (3 cr)
___(GEO) 316 Geography of Africa (3 cr)

Geography Internship

___Internship (Junior Status-2.0 Required) 3 cr

Foreign Language Requirement 6 cr

___( )______________________________(3cr)
___( )______________________________(3cr)

Computer Science/Math/Psychology Requirement 6 cr

Select 1 Course:
___(MAT) 102 Introduction to Statistics (3 cr)
___(MAT) 170 Elementary Stat. for Social Science (4 cr)
___(PSY) 205 Research Design & Statistics for Behavioral Science (3 cr)

Select 1 Course:
___(CPS) 105 Computer Science for Liberal Studies (3 cr)
___(CPS) 246 Structured Computer Programming (4 cr)

Economics Requirements 3 cr

Select 1 course:
___(ECN) 101 Principles of Macroeconomics (3 cr)
___(ECN) 102 Principles of Microeconomics
___(ECN) 319 International Economics: Theory (3 cr)
___(ECN) 321 International Economics: Policy (3 cr)

For Background-Recommend the following:
___(GEO) 101 World Geography (3 cr) OR
___(GEO) 103 Geography of the U.S. and Canada (3 cr) OR
___(GEO) 140 Cultural Geography (3 cr)

Free Electives 10+cr

***Major Requirement Fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

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GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	GEO 101 World Geography or GOE 103 Geography of U.S. & Canada EO 105 Physical Geography
Semester II	Core Course Language Track Course

Wait until sophomore year to take Economics.

General Education courses should be completed as soon as possible.

GEOGRAPHY-B.S.Ed.
Comprehensive Social Studies

General Education Requirements

I. Required Skills and Competencies 16 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 170 Elementary Stat. for Social Sci. (4 cr)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
Recommended
____(CPS) 105 Computer Science for Liberal Studies

B: Literary, Artistic & Cultural Traditions (9 cr)
___(   )______________________________
___(   )______________________________
___(   )______________________________

C: Biological & Physical Sciences (9 cr)
Recommended
___(ESS)______________________________
___(   )______________________________
___(   )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___(GEO) 103 Geo. of U.S. & Canada

E: Social & Behavioral Science (6 cr)
___(ANT) 111 Cultural Anthropology OR
ANT 211 Comparative Cultures
___(SOC) 101 Principles of Sociology

III. General Education Electives 15 cr

___(GOV) 104 Am. Gov/Constitutional & Pol. Fd. (3 cr)
___(GOV) 105 Am. Gov/Institutions & Public Pol. (3 cr)
___(GOV) 150 Intro. to International Relations (3 cr)
___(ECN) 102 Principles of Microeconomics (3 cr)
___(PSY) 101 General Psychology (3 cr)

Geography Requirement 27 cr

___(GEO) 101 World Geography (3 cr)
___(GEO) 140 Cultural Geography (3 cr)
___(GEO) 230 Economic Geography (3 cr)
___(ESS) 111 Introduction to Atmosphere (3 cr)*
OR
(ESS) 110 Introduction to Geology (3 cr)*
___(GEO) A Regional Geography Course (3 cr)
___(GEO) A Regional Geography Course (3 cr)
___(GEO) A Topical Geography Course (3 cr)
___(GEO) A Topical Geography Course (3 cr)

Economics Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr) *
___(ECN) 103 Principles of Microeconomics (3 cr) *
___(ECN) Economics Elective (3 cr)

Psychology Requirement 9 cr

___(PSY) 101 General Psychology (3 cr) *
___(PSY) 310 Educational Psychology (3 cr) ** part of Professional Ed. Requirements
___(PSY) Psychology Elective (3 cr)

History Requirement 9 cr

___(HIS) A 200 Level U.S. History Course (3 cr)
___(HIS) World History I (3 cr) ***
___(HIS) World History II (3 cr) ***
*** Part of Required Skills and Competencies

Mathematics Requirement 4 cr

___(MAT) 170 Elementary Stat./Social Science (4 cr) *

Government Requirement 9 cr

___(GOV) 104 Am. Govt: Constit. & Pol. Found.(3 cr) *
___(GOV) 105 Am. Govt: Inst.& Public Policies (3 cr)*
___(GOV) 150 Intro. to International Relations (3 cr)*

Sociology/Anthropology Requirement 9 cr

___(SOC) 101 Principles of Sociology (3 cr) *
___(ANT) 111 Cultural Anthropology (3 cr) *
OR
(ANT) 211 Comparative Cultures (3 cr) *
___(SOC) or (ANT) Elective (3 cr)

Professional Education Requirements 27 cr

___(TCH) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)
___(EDU) 310 Teaching of Social Studies I (3 cr)
___(EDU) 311 Teaching of Social Studies II (3 cr)
___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

A field experience is required: See Advisor

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements **124 + cr**

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GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Year 1 GEO 101 World Geography
ESS 111 Intro to Atmosphere or ESS 110 Intro to Geology
SOC 101 Principles of Sociology
GOV 104 or 105 Government
PSY 101 General Psychology

Economics should not be taken until the sophomore year.

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GERMAN B.A.

General Education Requirements
I. Required Skills and Competencies 15 cr
___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any may listed under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr
A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

German Major Requirements 27 cr
___(GER) 150 German Civilization and Culture (3 cr)
___(GER) 200 Introduction to Reading & Translation (3 cr)
___(GER) 203 Intermediate German Conversation (3 cr)
___(GER) 209 German Phonetics (3 cr)
___(GER) 212 German Grammar (3 cr)
___(GER) 213 Advanced Composition & Stylistics (3 cr)
___(GER) 305 Advanced German Conversation (3 cr)
___(GER) 321 Readings in Ger. Lit. thru 18th Century (3 cr)
___(GER) 322 Readings in German Lit. thru 19th-20th Century (3 cr)

German Electives 9 cr
___(GER)______________________________(3 cr)
___(GER)______________________________(3 cr)
___(GER)______________________________(3 cr)

Free Electives 27 cr

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

YEAR I Any introdutory language courses necessary.

GERMAN/ENGLISH-B.S. Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any may listed under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )____________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________
___( )____________________
___( )____________________

C: Biological & Physical Sciences (9 cr)
___( )____________________
___( )____________________
___( )____________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________
___( )____________________

E: Social & Behavioral Science (6 cr)
___( )____________________
___( )____________________

III. General Education Electives 12 cr

German Major Requirements 27 cr

___(GER) 150 German Civilization and Culture (3 cr)
___(GER) 200 Introduction to Reading & Translation (3 cr)
___(GER) 203 Intermediate German Conversation (3 cr)
___(GER) 209 German Phonetics (3 cr)
___(GER) 212 German Grammar (3 cr)
___(GER) 213 Advanced Composition & Stylistics (3 cr)
___(GER) 305 Advanced German Conversation (3 cr)
___(GER) 321 Readings in Ger. Lit. thru 18th Century (3 cr)
___(GER) 322 Readings in German Lit. thru 19th-20th Century (3 cr)

German Electives 9 cr

___(GER)____________________(3 cr)
___(GER)____________________(3 cr)
___(GER)____________________(3 cr)

Professional Education Requirements 28-31 cr

___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)
___(EDU) 305 Applied Linguistics in Foreign Language Teaching (1 cr)
Must be taken together
___(EDU) 323 Teaching of Foreign Language I (3 cr)
___(EDU) 324 Teaching of Foreign Language II (3 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Strongly recommended:
___(RDG) 329 Reading in the Content Areas (3 cr)

Courses required for ML/English Double Certification 27 cr

___(ENG) 105 Literary Analysis (3 cr)
___(ENG) 233 Major American Writers 1650-1865 (3 cr)
___(ENG) 234 Major American Writers 1865-1945 (3 cr)
___(ENG) 236 Major British Writers 700-1789 (3 cr)
___(ENG) 237 Major British Writers 1789-1945 (3 cr)
___(ENG) 223 The Grammars of English (3 cr)
___(ENG) 209 Advanced Composition (3 cr)
___(ENG) 330 OR 331 Shakespeare (3 cr)
AND
One of the Following:
___(ENG) 467 Seminar in Drama (3 cr)
___(ENG) 468 Seminar in Fiction (3 cr)
___(ENG) 469 Seminar in Poetry (3 cr)

Electives: Strongly Recommended 6 cr

___(SPE) 255 Speech Criticism (3 cr)
___(EDU) 321 Teaching of English in Secondary Schools (3 cr)

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

YEAR I Any introductory language courses necessary.

GERMAN-B.S. Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any may listed under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )___________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

C: Biological & Physical Sciences (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

D: Political, Economic & Geographic Science (6 cr)
___( )___________________________
___( )___________________________

E: Social & Behavioral Science (6 cr)
___( )___________________________
___( )___________________________

III. General Education Electives 12 cr

German Major Requirements 27 cr

___(GER) 150 German Civilization and Culture (3 cr)
___(GER) 200 Introduction to Reading & Translation (3 cr)
___(GER) 203 Intermediate German Conversation (3 cr)
___(GER) 209 German Phonetics (3 cr)
___(GER) 212 German Grammar (3 cr)
___(GER) 213 Advanced Composition & Stylistics (3 cr)
___(GER) 305 Advanced German Conversation (3 cr)
___(GER) 321 Readings in Ger. Lit. thru 18th Century (3 cr)
___(GER) 322 Readings in German Lit. thru 19th-20th Century (3 cr)

German Electives 9 cr

___(GER)___________________________(3cr)
___(GER)___________________________(3cr)
___(GER)___________________________(3cr)

Professional Education Requirements 28-31 cr

___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)
___(EDU) 305 Applied Linguistics in Foreign Language Teaching (1 cr)
Must be taken together
___(EDU) 323 Teaching of Foreign Language I (3 cr)
___(EDU) 324 Teaching of Foreign Language II (3 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

YEAR I Any introductory language courses necessary.

GOVERNMENT-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

- ___(ENG) 101 English Composition OR
  (ENG) 110 Advanced Placement English (3 cr)
  Student may need to take (ENG) 100 Basic Writing first, based on test results.
- ___(SPE) 100 Basic Oral Communication (3 cr)
- ___Mathematical Competency-Recommended
  (MAT) 170 Elem. Stats. for Social Science
- ___(HIS) 105 World History I (3 cr) AND
- ___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(SOC) 101 Principles of Sociology
___( )______________________________

III. General Education Electives 12 cr

Government Requirements

CORE COURSES 12 cr
___(GOV) 104 Am Gov/Constitutional & Political Foundations (3 cr)
___(GOV) 105 Am Gov/Institutional & Public Pol. (3 cr)
___(GOV) 110 Introduction to Government & Politics (3 cr)
___(GOV) 213 Public Administration (3 cr)

Government Electives

24 cr

Select one course from each sub-area:

A Public Law/Political Theory Course
___(GOV)______________________________(3cr)

A International Relations/Comparative Government Course
___(GOV)______________________________(3cr)

A State/Local Government Course
___(GOV)______________________________(3cr)

An American Politics Course
___(GOV)______________________________(3cr)

Electives (Choose 4 courses/internship)
___(GOV)______________________________(3cr)
___(GOV)______________________________(3cr)
___(GOV)______________________________(3cr)
___(GOV)______________________________(3cr)

Economics Requirement

9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr) *
___(ECN)______________________________(3cr)
___(ECN)______________________________(3cr)

Sociology Requirement

6 cr

___(SOC) 101 Principles of Sociology (3 cr) *
___( )______________________________(3cr)

Math Recommendation

4 cr

___(MAT) 170 Elementary Statistics for Social Science (4 cr) *

Free Electives

5-6 cr

Total Graduation Requirements 120 cr

***Major requirement fulfills General Education Credit(s)**

****

GPA Needed to Declare:	0-59 cr	2.0
	60-74 cr	2.3 *and student must have completed GOV 104 and 105*
	Over 75 cr	*Not permitted to delare*

Recommended Sequence of Courses:

Year I	GOV 104 American Government: CPF GOV 105 American Government: IPP
Year II	GOV 110 Intro to Government and Politics

HISTORY-B.A.

General Education Requirements
I. Required Skills and Competencies 15 cr
___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Any math listed under Category "A" in the Gen Ed Program
(MAT) 102 Introduction to Statistics
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr
A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

History Requirements 30 cr
___(HIS) 103 Early History of the United States (3 cr)
___(HIS) 104 Recent History of the United States (3 cr)

Restricted Electives: (200 level or above)
___(HIS) An American History Course (3 cr)
___(HIS) A European History Course (3 cr)
___(HIS) A Non-Western History Course (3 cr)
___(HIS) A Non-Western History Course (3 cr)

History Electives: (200 level or above)
___(HIS)______________________________(3cr)
___(HIS)______________________________(3cr)
___(HIS)______________________________(3cr)
___(HIS)______________________________(3cr)

Free Electives 30 cr

Total Graduation Requirements 120 cr

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Year 1 HIS 105 World History I
HIS 106 World History II
ENG 101 English Composition
SPE 100 BOC

HISTORY B.S.Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any math listed under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )___________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

C: Biological & Physical Sciences (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

D: Political, Economic & Geographic Science (6 cr)
___(GEO) 101 World Geography
___(ECN) 101 Principles of Macroeconomics
OR
(ECN) 102 Principles of Microeconomics

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 18 cr

___(GOV) An American Government Elective (3 cr)
___(GOV) An American Government Elective (3 cr)
___(ANT) Anthropology Elective
___(GEO) 103 Geography of the U.S. and Canada (3 cr)
Two 200 level or above courses from *one* of the following areas:
ANT, GEO, GOV, SOC, ECN, PSY
___( ) ___________________________(3 cr)
___( ) ___________________________(3 cr)

History Requirements 24 cr

___(HIS) 103 Early History of the United States (3 cr)
___(HIS) 104 Recent History of the United States (3 cr)

Restricted Electives: (200 level or above)
___(HIS) American History (3 cr)
___(HIS) European History (3 cr)
___(HIS) Non-Western History (3 cr)
___(HIS) Non-Western History (3 cr)

History Electives: (200 level or above)
___(HIS)___________________________(3 cr)
___(HIS)___________________________(3 cr)

Economics Requirements * 3 cr

Choose 1:
___(ECN) 101 Principles of Macroeconomics OR
(ECN) 102 Principles of Microeconomics (3 cr)

Geography Requirement* 6 cr

___(GEO) 101 World Geography (3 cr) *
___(GEO) 103 Geography of the U.S. & Canada (3 cr) *

Psychology Requirement 3 cr

___(PSY) 101 General Psychology (3 cr) *

Sociology/Anthropology Requirement 6 cr

___(SOC) 101 Principles of Sociology (3 cr) *
___(ANT) Anthropology Elective (3 cr) *

Government Requirement 6 cr

___(GOV) American Government Elective (3 cr) *
___(GOV) American Government Elective (3 cr) *

Free Elective 4 cr

Professional Education Requirements 27 cr

___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)

Must be taken simultaneously
___(EDU) 310 Teaching of Social Studies I (3 cr)
___(EDU) 311 Teaching of Social Studies II (3 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Total Graduation Requirements 120 cr

***Major requirement fulfills General Education credit(s)**

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Year I HIS 105 World History I
HIS 106 World History II
GEO Geography

Do not begin economics courses until the sophomore year.

INTERDISIPLINARY ARTS-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Any math listed in Category A of the General Education Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Student must choose one primary and two auxiliary areas from the Art, English, Music, and Speech/Theater Departments.

Primary Area: (Minimum Requirements) 18 cr

Auxiliary Area 1: (Minimum Requirments) 12 cr

Auxiliary Area 2: (Miminum Requirements) 12 cr

Interdisiplinary Seminar 6 cr

Project: To be completed during the senior year

Free Electives: 12 cr

All course selections are made with the specific project in mind.

Total Graduation Requirements 120 cr

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GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Year I General Education courses

MATHEMATICS-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency (MAT) 211 Calculus I
(Student may need to take Pre-Calc first)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Mathematics Requirements 30 cr

___(MAT) 211 Calculus I (4 cr)
___(MAT) 212 Calculus II (4 cr)
___(MAT) 213 Calculus III (4 cr)
___(MAT) 223 Differential Equations (3 cr)
___(MAT) 225 Discrete Mathematics (3 cr)
___(MAT) 320 Introduction to Abstract Algebra (3 cr)
___(MAT) 428 Linear Algebra I (3 cr)
___(MAT) 441 Advanced Calculus I (3 cr)
___(MAT) 475 Probability and Statistics I (3 cr)

Computer Science Requirement 4 cr

___(CPS) 246 Structured Computer Programming (4 cr)

Recommended:

___(CPS) 340 Advanced Fortran Programming 3 cr

Track Requirements 9 cr

One of the following:
___(MAT) 420 Abstract Algebra (3 cr)
___(MAT) 429 Linear Algebra II (3 cr)
___(MAT) 442 Advanced Calculus II (3 cr)
AND
2 Math or Computer Science Electives
300 Level or Above
___( )______________________(3 cr)
___( )______________________(3 cr)

One of the Following Quantitative Sequences 9-12 cr

Courses counted in sequence cannot be counted as elective

A. Chemistry
___(CHM) 121 Chemical Bonding (3 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 125 Lab IB
___(CHM) 126 Lab IIB

B. Economics
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomics Theory
___(ECN) 484 Math Economics
___(ECN) 485 Econometrics

C. Operations Research
___(MAT) 326 Mathematical Modeling
___(MAT) 456 Mathematics of Operations Research I
___(MAT) 480 Probability & Statistics II

D. Physics
___(PHY) 205 Intermediate Physics I
___(PHY) 206 Intermediate Physics II

E. Pre Graduate School
___(MAT) 420 Abstract Algebra
___(MAT) 429 Linear Algebra II
___(MAT) 442 Advanced Calculus II

Total Graduation Requirements **120 cr**

GPA Needed to Declare: 2.0

Student must have completed Calculus I with a grade of "C" or better.

Recommended Sequence of Courses:

Semester I MAT 211 Calculus I (4 cr)
CPS 246 Structured Computer Prog. (4 cr)

NOTE: Recommended Course Load 14 credits

Semester II MAT 212 Calculus II (4 cr)

NOTE: Recommended Course Load 16 credits

Semester III MAT 213 Calculus III (4 cr)
MAT 225 Discrete Mathematics

Semester IV MAT 320 Intro. to Abstract Algebra
MAT 223 Differential Equations

MATHEMATICS-B.S. Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr
___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency (MAT) 211 Calculus I
(Student may need to take Pre-Calc first)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr
A: Language/Numbers for Rational Thinking (3 cr)
___( )________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________
___( )________________
___( )________________

C: Biological & Physical Sciences (9 cr)
___( )________________
___( )________________
___( )________________

D: Political, Economic & Geographic Science (6 cr)
___( )________________
___( )________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___( )________________

III. General Education Electives 12 cr
12 credits to be chosen from the Professional Certification Requirements

Mathematics Requirements 30 cr
___(MAT) 211 Calculus I (4 cr)
___(MAT) 212 Calculus II (4 cr)
___(MAT) 213 Calculus III (4 cr)
___(MAT) 225 Discrete Mathematics (3 cr)
___(MAT) 320 Intro. to Abstract Algebra (3 cr)
___(MAT) 333 Euclidean & Non-Euclidean Geometry I (3 cr)
___(MAT) 428 Linear Algebra (3 cr)
___(MAT) 441 Advanced Calculus I (3 cr)
___(MAT) 475 Probability and Statistics I (3 cr)

RECOMMENDED-One of the following:
___(MAT) 420 Abstract Algebra (3 cr)
___(MAT) 429 Linear Algebra II (3 cr)
___(MAT) 442 Advanced Calculus II (3 cr)
___(MAT) 444 Modern Geometry (3 cr)

Computer Science Requirement 7 cr
Must be taken in this order:
___(CPS) 180 Microcomputer Basic (3 cr)
___(CPS) 246 Structured Computer Programming (4 cr)

Psychology Requirement 3 cr
Can be used in meeting Gen Ed requirements
___(PSY) 101 General Psychology (3 cr)

Professional Certification Requirements 28 cr
A total of 28 credits required-12 taken under General Education Electives:
___(TCH) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)

The following must be taken together from the Math Dept.
___(EDU) 301 Evaluative Techniques & Guidance (2 cr)
___(EDU) 335 Teaching of Mathematics (3 cr)
___(EDU) 370 Utilization of Instructional Media (2 cr)

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Non-Course Requirements:

Pre-Student Teaching Experience
Professional Standing
2.5 GPA overall
2.5 GPA in major
National Teacher's Exam

Recommended but not required:
___(HPE) 200 Health

Total Graduation Requirements 120+ cr

* * *

GPA Needed to Declare: 2.5

Student must have completed Calculus I with a grade of "C" or better.

Recommended Sequence of Courses:

Semester I
MAT 211 Calculus I (4 cr)
CPS 180 Microcomputer BASIC (3 cr)
PSY 101 General Psychology

NOTE: Recommended Course Load 16 credits

Semester II
MAT 212 Calculus II (4 cr)
CPS 246 Structured Computer Prog. (4 cr)

NOTE: Recommended Course Load 14 credits

Semester III
MAT 213 Calculus III (4 cr)
MAT 225 Discrete MAthematics (3 cr)
TCH 205 American School (3 cr)

Semester IV
MAT 333 Euclidean & Non-Euclidean Geometry (3 cr)
MAT 320 Intro. to Abstract Algebra (3 cr)
PSY 310 Educational Psychology (3 cr)

ADVISING STUDENTS WHO ARE INTERESTED IN A CAREER IN MATHEMATICS/COMPUTER SCIENCE

Admission to the Major:

Generally, incoming undergraduate students who are admitted to majors in the department of mathematics/computer science will have the following characteristics: average SAT scores of about 1,000,average math SAT scores of about 550,and at least three years of high school mathematics with grades of "C" or better. Students who wish to transfer into a major must have successfully completed a mathematics and/or computer science entry-level course.

Characteristics of the Program:

Students can expect to spend a minimum of four hours doing outside work for every one hour spent in class. Student performance tends to be strong if they can devote some time every day to practice and study.

In the beginning stages, the mathematics and computer science disciplines are sequential. Each step must be mastered before attempting the next step. It is essential to get assistance if there is confusion regarding the subject matter.

Major major sequences (Students are placed at the appropriate beginning level based on SAT math scores, high school and college math performance, and departmental tests).

MAT100, MAT124 (do not count in the major), MAT211, MAT212, and approximately ten other upper level math and/or computer science courses.

Computer Science major sequences:

CPS246, CPS247, CPS256, CPS257, and approximately ten other upper level computer science courses.

CPS246 needs to be taken after or concurrently with MAT124 or MAT211.

CPS247 needs to be taken after or concurrently with MAT211 or MAT212.

Requirements for Admission to General Education Math Courses:

MAT100 Introductory Algebra: Pre-College level placement on exam.

MAT124 Pre-Calculus Mathematics: College level on placement on exam or "C" or better in MAT100.

MAT211 Calculus I or MAT181 Applied Calculus I: Advanced placement on exam or successful completion of MAT124.

MAT102 Introduction to Statistics or MAT170 Elementary Statistics for Social Science: Passed MAT100 or placed at college level on exam.

MAT105 Mathematics for Liberal Studies: Passed MAT100 or placed at college leel on exam.

Current Options to Develop Math Background:

Resources are available at the Learning Assistance Center, the Tutoring Center and the Study Skills Center. It is also possible to take preparatory courses at Shippensburg University or some junior and community colleges during the summer term.

To complete these programs within four years, students must get started on their math sequence as early as possible.

Source: Bell, H.T.,Professor/Chairperson, Mathematics/Computer Science Department, Shippensburg University, Shippenburg, Pennsylvania, June, 1991.

MATHEMATICS & COMPUTER SCIENCE-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

- ___(ENG) 101 English Composition OR
  - (ENG) 110 Advanced Placement English (3 cr)
  - Student may need to take (ENG) 100 Basic Writing first, based on test results.
- ___(SPE) 100 Basic Oral Communication (3 cr)
- ___Mathematical Competency (MAT) 211 Calculus I
  - (Student may need to take Pre-Calc first)
- ___(HIS) 105 World History I (3 cr) AND
- ___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)

___( )____________________________

B: Literary, Artistic & Cultural Traditions (9 cr)

___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
See Quantitative System Sequence

___( )____________________________
___( )____________________________
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)

___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)

___( )____________________________
___( )____________________________

III. General Education Electives 12 cr

Mathematics Requirements 33 cr

- ___(MAT) 211 Calculus I (4 cr)
- ___(MAT) 212 Calculus II (4 cr)
- ___(MAT) 213 Calculus III (4 cr)
- ___(MAT) 223 Differential Equations (3 cr)
- ___(MAT) 225 Discrete Mathematics (3 cr)
- ___(MAT) 320 Introduction to Abstract Algebra (3 cr)
- ___(MAT) 410 Numerical Analysis I (3 cr)
- ___(MAT) 428 Linear Algebra I (3 cr)
- ___(MAT) 441 Advanced Calculus I (3 cr)
- ___(MAT) 475 Probability and Statistics I (3 cr)

Computer Science Requirements 18 cr

- ___(CPS) 246 Structured Computer Programming (4 cr)
- ___(CPS) 247 Data Structures (3 cr)
- ___(CPS) 256 Computer Organization & Programming (3 cr)
- ___(CPS) 257 Computer Systems Concepts (3 cr)
- ___(CPS) 340 Advanced Fortran Programming (3 cr)

One of the following: 3 cr

- ___(MAT) 411 Numerical Analysis II (3 cr)
- ___(MAT) 429 Linear Algebra II (3 cr)
- ___(MAT) 442 Advanced Calculus II (3 cr)
- ___(MAT) 480 Probability and Statistics II (3 cr)

AND

One of the following: 3 cr

- ___(CPS) 321 Programming Languages (3 cr)
- ___(CPS) 415 Simulation of Stochastic Systems (3 cr)
- ___(CPS) 425 Simulation of Physical Systems (3 cr)

Quantitative System Sequence 8-9 cr

ONE (1) of the following Sequences
May be used in meeting Gen Ed requirements

A. Chemistry
- ___(CHM) 121 Chemical Bonding (3 cr)
- ___(CHM) 122 Chemical Dynamics (3 cr)
- ___(CHM) 125 Lab IB
- ___(CHM) 126 Lab IIB

B. Economics
- ___(ECN) 102 Principles of Microeconomics
- ___(ECN) 260 Intermediate Microeconomics Theory
- ___(ECN) 484 Math Economics
- ___(ECN) 485 Econometrics

C. Operations Research
- ___(MAT) 326 Mathematical Modeling
- ___(MAT) 456 Mathematics of Operations Research I
- ___(MAT) 480 Probability & Statistics II

D. Physics
- ___(PHY) 205 Intermediate Physics I
- ___(PHY) 206 Intermediate Physics II

Total Graduation Requirements **120 cr**

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GPA Needed to Declare: 2.0

Student must have completed Calculus I and Structured Computer Programming with a grade of "C" or better.

Recommended Sequence of Courses:

Semester I	MAT 211 Calculus I (4 cr) CPS 246 Structured Computer Program. (4 cr)
	NOTE: Recommended Course Load 14 credits
Semester II	MAT 212 Calculus II (4 cr) CPS 247 Data Structures (3 cr)
	NOTE: Recommended Course Load 16 credits
Semester III	MAT 213 Calculus III (4 cr) CPS 256 Computer Organization & Prog.(3 cr) MAT 225 Discrete Mathematics (3 cr)
Semester IV	MAT 223 Differential Equations (3 cr) CPS 257 Computer Systems Concepts (3 cr) MAT 320 Intro to Abstract Algebra

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PHYSICS-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I (4 cr)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 212 Calculus II

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___(CHM) 122 Chemical Bonding and IB Lab
___(PHY) 205 Intermediate Physics I
___(BIO) 106 Principles of Biology

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Physics Requirements 41 cr

___(PHY) 105 Problem Solving in the Sciences (2 cr)
___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr)
___(PHY) 305 Modern Physics I (4 cr)
___(PHY) 306 Modern Physics II (4 cr)
___(PHY) 393 Special Topics: Transitional Mechanics (3 cr)
___(PHY) 442 Mathematical Physics (3 cr)
___(PHY) 300-400 Level Elective }
___(PHY) 300-400 Level Elective } 17 cr
___(PHY) 300-400 Level Elective } required
___(PHY) 300-400 Level Elective }

Mathematics/Computer Science Requirements 20 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr)
___(MAT) 213 Calculus III (4 cr)
___(MAT) 223 Differential Equations (3 cr)
___(CPS) 246 Structured Computer Programming (4 cr)

Chemistry Requirements 8 cr

___(CHM) 121 Chemical Bonding (3 cr) *
___(CHM) 125 Lab IB (1 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 126 Lab IIB (1 cr)

Biology Requirement 4 cr

___(BIO) 106 Principles of Biology (4 cr) *

Free Electives 14 cr

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I
MAT 211 Calculus I
PHY 205 Intermediate Physics I
PHY 105 (Problem Solving in the Sciences)
One Gen Ed Course
(13 cr)

Chemistry should be taken in the sophomore year (exceptional students may take it earlier)

Structured Computer Programming should be taken early in the program.

PHYSICS-B.S.Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 211 Calculus I
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___(MAT) 212 Calculus II (4 cr)

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________________
___( )________________________
___( )________________________

C: Biological & Physical Sciences (9 cr)
___(PHY) 205 Intermediate Physics I (4 cr)
___(CHM) 121 Chemical Bonding (3 cr)
___(BIO) 106 Principles of Biology (4 cr)

D: Political, Economic & Geographic Science (6 cr)
___( )________________________
___( )________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___( )________________________

III. General Education Electives 12 cr

Physics Requirements 35 cr

___(PHY) 105 Problem Solving in the Sciences (2 cr)
___(PHY) 205 Intermediate Physics I (4 cr) *
___(PHY) 206 Intermediate Physics II (4 cr)
___(PHY) 305 Modern Physics I (4 cr)
___(PHY) 306 Modern Physics II (4 cr)
___(PHY) 393 Special Topics: Transitional Mechanics (3 cr)
___(PHY) 400 Level Elective }
___(PHY) 400 Level Elective } 14 cr
___(PHY) 400 Level Elective } required

Mathematics/Computer Science Requirements 20 cr

___(MAT) 211 Calculus I (4 cr) *
___(MAT) 212 Calculus II (4 cr) *
___(MAT) 213 Calculus III (4 cr)
___(MAT) 223 Differential Equations (3 cr)

Chemistry Requirements 8 cr

___(CHM) 121 Chemical Bonding (3 cr) *
___(CHM) 125 Lab IB (1 cr)
___(CHM) 122 Chemical Dynamics (3 cr)
___(CHM) 126 Lab IIB (1 cr)

Biology Requirement 4 cr

___(BIO) 106 Principles of Biology (4 cr) *

Professional Education Requirements 27 cr

___(TCH) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)
___(EDU) 340 Teaching Science In Secondary School I (3 cr)
___(EDU) 341 Curriculum & Evaluation in the Secondary Science Classroom I (3 cr)
___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Psychology Requirement 3 cr

___(PSY) 101 General Psychology (3 cr) *

Free Electives 2 cr

*Major requirement fulfills General Education Credit(s)

Total Graduation Requirements 120+cr

* * *

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Semester I	MAT 211 Calculus I PHY 205 Intermediate Physics I PHY 105 Problem Solving in the Sciences One Gen Ed Course (13 cr)

Chemistry should be taken in the sophomore year (exceptional students may take it earlier)

Structured Computer Programming should be taken early in the program.

POLITICAL SCIENCE-B.S. Ed.
Comprehensive Social Studies

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 170 Elementary Statistics for Social Science
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________________
___( )________________________
___( )________________________

C: Biological & Physical Sciences (9 cr)
___(ESS) 110 Introduction to Geology
OR
(ESS) 111 Introduction to Atmosphere
___( )________________________
___( )________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___(GEO) 101 World Geography

E: Social & Behavioral Science (6 cr)
___(SOC) 101 Principles of Sociology
___(ANT)________________________

III. General Education Electives 15 cr

Required:
___(GEO) 103 Geography of U.S. & Canada (3 cr)
___(ECN) 102 Principles of Microeconomics (3 cr)
___(HIS) American History Elective (3 cr)
Choose One
___(PSY) 101 General Psychology (3 cr)
OR
(PSY) 102 Found. of Psychology-Personal-Social(3 cr)
Choose One
___(ECN) 305 Money and Banking (3 cr)
OR
(ECN) An Economics Elective (3 cr)

Political Science Requirements 24 cr

___(GOV) 104 American Gov.: Constitutional & Political Foundations (3 cr)
___(GOV) 105 American Gov.: Inst. & Public Pol. (3 cr)
___(GOV) 110 Introduction to Government & Politics (3 cr)
AND
Select one course from each sub-area:
An American Politics Course
___(GOV)________________________(3 cr)

An International Relations/Comparative Government Course
___(GOV)________________________(3 cr)

A Public Law/Political Theory Course
___(GOV)________________________(3 cr)

A State/Local Government Course
___(GOV)________________________(3 cr)
AND
___(GOV) A Government Elective (3 cr)

Economics Requirement 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr) *
___(ENC) 102 Principles of Microeconomics (3 cr)*
Choose one:
___(ENC) 305 Money and Banking (3 cr) *
OR
(ENC) An Economics Elective (3 cr) *

Sociology/Anthropology Requirement 9 cr

___(SOC) 101 Principles of Sociology (3 cr) *
___(SOC) A Sociology Elective (3 cr)
AND
Choose one:
___(ANT) 111 Cultural Anthropology (3 cr) *
OR
ANT 211 Comparative Cultures (3 cr) *

Math Requirement 4 cr

___(MAT) 170 Elementary Statistics for Social Science (4 cr) *

History Requirement 3 cr

___(HIS) An American History Elective (3 cr) *

Earth Science/Geography Requirement 9 cr

___(ESS) 110 Introduction to Geology *
OR
(ESS) 111 Introduction to Atmosphere *
AND
___(GEO) 101 World Geography (3 cr) *
___(GEO) 103 Geography-United States/Canada (3 cr) *

Psychology Requirements 6 cr

___(PSY) 102 Found./Psychology: Social-Personal (3 cr) *
OR
___(PSY) 105 Research Design & Statistics for Behavioral Sciences I (3 cr) *

___(PSY) 101 General Psychology *
OR
(PSY) A Psychology Elective (3 cr) *

Professional Education Requirements 27 cr

___(TCH) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)
___(EDU) 310 Teaching of Social Studies I (3 cr)
___(EDU) 311 Teaching of Scoial Studies II (3 cr)
___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Total Graduation Requirements 120 + cr

***Major requirement fulfills General Education Credit(s)**

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Semester I	GOV 104 American Government: CPF OR GOV 105 American Government: IPP
Semester II	GOV 104 American Government: CPF OR GOV 105 American Government: IPP
Semester III	Introduction to Government/Politics

PSYCHOLOGY-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Any mathematics course listed under category A of the Gen Ed program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Psychology Requirements

CORE COURSES 12 cr

Courses are sequential
___(PSY) 102 Found. of Psychology:Personal-Social (3 cr)
___(PSY) 105 Research Design & Statistics for Behavioral Sciences I (3 cr)
___(PSY) 205 Research Design & Statistics for Behavioral Sciences II (3 cr)
AND
___(PSY) 301 Experimental Psychology (3 cr)
OR
___(PSY) 305 Applied Research Methods in Psychology (3 cr)

FOUNDATIONS 9 cr

Select three (3) courses
___(PSY) 210 Human Development (3 cr)
___(PSY) 235 Conditioning and Learning (3 cr)
___(PSY) 240 Psychology of Personality (3 cr)
___(PSY) 260 Child Growth and Development (3 cr)
___(PSY) 270 Social Psychology (3 cr)
___(PSY) 320 Physiological Psychology (3 cr)
___(PSY) 325 Psychology of Human Cognition (3 cr)
___(PSY) 330 Abnormal Psychology (3 cr)
___(PSY) 430 Sensation and Perception (3 cr)
___(PSY) 440 History & Systems of Psychology (3 cr)

Psychology Electives 12 cr

___(PSY)______________________________(3 cr)
___(PSY)______________________________(3 cr)
___(PSY)______________________________(3 cr)
___(PSY)______________________________(3 cr)

Free Electives or Minor 27 cr

All Psychology majors are strongly encouraged to take a minor (18 cr) in a related field.

The following tracts are available. See the Psychology Dept. for appropriate course listings.

Business-Organizational
Clinic-Counseling
Developmental
Human Services
Learning-Memory
Personality-Social
Psychological-Comparative
School Psychology
Statistical-Mathematical

Psychology Internships (PSY) 385 and (PSY) 386 have prerequisites depending on type of internship

-These courses are in addition to the total 33 credits required by the program.

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 0- 60 cr 2.0
61 cr or more 2.4

Recommended Sequence of Courses:

Year I	PSY 102 Foundations of Psychology PSY 105 Research Design & Statistics for Behavioral Science I
Year II	PSY 205 Research Design & Statistics for Behavioral Science II Begin Foundation Courses
Year III	PSY 301 Experimental Psychology OR PSY 305 Applied Research Methods in Psychology

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PSYCHOLOGY B.S.Ed.
Comprehensive Social Studies

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Any math course listed under Category A of the Gen Ed program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )____________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
___(ESS) 110 Intro to Geology OR
(ESS) 111 Intro to Atmosphere
___( )____________________________
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)
See program requirements under ECN, GOV, GEO
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___(SOC) 101 Principles of Sociology
___(ANT) 111 Cultural Anthropology

III. General Education Electives 12 cr

See program requirements

Psychology Requirements

CORE COURSES 21 cr

___(PSY) 102 Found. of Psychology:Personal-Social (3 cr)
___(PSY) 105 Research Design & Statistics for Behavioral Sciences I (3 cr)
___(PSY) 235 Conditioning and Learning (3 cr)
OR
(PSY) 325 Human Cognition (3 cr)
___(PSY) 270 Social Psychology (3 cr)

Psychology Electives
___(PSY) A developmental psychology course (3 cr)
PSY 210, PSY 260 or PSY 351
___(PSY) An applied psychology course (3 cr)
___(PSY)____________________________(3 cr)

History Requirement 3 cr

___(HIS) 104 Recent History of the United States (3 cr) *

Government (Political Science) Requirement 9 cr

___(GOV) 104 Am Govt: Constitutional & Political Foundations (3 cr) *
___(GOV) 105 Am Govt: Inst. & Public Policies (3 cr) *
___(GOV)____________________________(3 cr) *

Sociology/Anthropology Requirement 9 cr

___(SOC) 101 Principles of Sociology (3 cr) *
___(ANT) 111 Cultural Anthropology (3 cr) *
___(SOC) Sociology Elective (3 cr) *

Geography Requirement 9 cr

___(GEO) 101 World Geography (3 cr) *
OR
(GEO) 103 Geography of U.S. & Canada (3 cr) *
___(ESS) 111 Introduction to Atmosphere (3 cr) *
OR
(ESS) 110 Introduction to Geology (3 cr) *
___(GEO) Geography Elective (3 cr) *

Economic Requirement 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr) *
___(ECN) 102 Principles of Microeconomics (3 cr) *
___(ECN) Economics Elective *
OR
(GEO) 230 Economic Geography (3 cr) *

Professional Education Requirements 27 cr

___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)
___(EDU) 310 Teaching of Social Studies I (3 cr)
___(EDU) 311 Teaching of Social Studies II (3 cr)
___(EDU) 390 Student Teach. & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements 120+ cr

* * *

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

Year I	PSY 102 Foundations of Psychology PSY 105 Reseach Design & Statistics for Behavioral Sciences (3 cr) General Education Courses

PUBLIC ADMINISTRATION-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended (MAT) 170 Elem. Stats for Social Science (4 cr)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________________
___( )________________________
___( )________________________

C: Biological & Physical Sciences (9 cr)
___( )________________________
___( )________________________
___( )________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN)101 Principles of Macroeconomics
___( )________________________

E: Social & Behavioral Science (6 cr)
___(SOC)101 Principles of Sociology
___( )________________________

III. General Education Electives 12 cr

Government Requirements

CORE COURSES 12 cr
___(GOV) 104 American Gov/Constitutional & Political Foundations (3 cr)
___(GOV) 105 American Gov/Institutions & Public Pol.(3 cr)
___(GOV) 110 Introduction to Government & Politics (3 cr)
___(GOV) 213 Public Administration (3 cr)

Government Electives 24 cr

Governmental (Choose 1 or 2 courses)
___(GOV) 203 State and Local Government (3 cr)
___(GOV) 207 Municipal Gov. & Administration (3 cr)
___(GOV) 413 Pennsylvania Local Government (3 cr)

Managerial (Choose 2 or 3 courses)
___(GOV) 316 Public Management (3 cr)
___(GOV) 317 Public Personnel Administration (3 cr)
___(GOV) 318 Public Financial Administration (3 cr)

Sub-areas (Choose 2 or 3 courses)
___(GOV) 208 Regional & Urban Planning (3 cr)
___(GOV) 215 Comparative Administration (3 cr)
___(GOV) 225 Federal-State-Local Relations (3 cr)
___(GOV) 350 Principles of Labor Relations (3 cr)
___(GOV) 355 Legal Framework Collective Bargaining in the Public Sector (3 cr)
___(GOV) 440 Public Service Ethics (3 cr)

Electives (Choose 3 courses or internship)
___(GOV)________________________(3 cr)
___(GOV)________________________(3 cr)
___(GOV)________________________(3 cr)

Accounting Requirement 6 cr
___(ACC) 200 Fund.of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Economics Requirement 9 cr
___(ECN) 101 Principles of Macroeconomics (3 cr) *
___(ECN)________________________(3 cr)
___(ECN)________________________(3 cr)

Sociology Requirement 6 cr
___(SOC) 101 Principles of Sociology (3 cr) *
___(SOC)________________________(3 cr)

Free Electives 9 cr

Total Graduation Requirements 120 cr

***Major requirement fulfills General Education Credit(s)**

* * *

GPA Needed to Declare:	0-59 cr	2.0
	60-74 cr	2.3 *and student must have completed GOV 104 and 105*
	Over 75 cr	*Not permitted to delare*

Recommended Sequence of Courses:

YEAR I	GOV 104 American Government: CPF GOV 105 American Government: IPP
YEAR II	GOV 110 Intro to Government and Politics

All accounting courses should be completed by the junior year.

SOCIOLOGY-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 170 Elem. Stats for Social Science
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(PHL) Philosophy Elective

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________
___( )____________________
___( )____________________

C: Biological & Physical Sciences (9 cr)
___( )____________________
___( )____________________
___( )____________________

D: Political, Economic & Geographic Science (6 cr) Recommended
___(GOV) 104 Am. Gov/Constitutional & Pol. Found.
___(ECN) 101 Principles of Macroeconomics

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(ANT) 111 Cultural Anthropology

III. General Education Electives 15 cr

___(PSY) Psychology Elective
___(GEO) Geography Elective
___(CRJ) 100 Intro. to Criminal Justice
___(GOV) 105 Am. Govt: Institutions and Public Policy
___(ANT) Anthropology Elective (Recommended) _

Sociology Requirements 33 cr

___(SOC) 101 Principles of Sociology (3 cr)
___(SOC) 241 Contemporary Social Problems (3 cr)[1]
___(SOC) 395 Introduction to Social Research (3 cr)[2]
___(SOC) 254 Social Organization and Social Change (3 cr)[3]
___(SOC) 450 Social Theory (3 cr)[4]
___(SOC) Sociology Elective[2] ***
___(SOC) Sociology Elective[2]
___(SOC) Sociology Elective[3]
___(SOC) Sociology Elective[3]
___(SOC) Sociology Elective[4]
___(SOC) Sociology Elective[4]

Philosophy/Psychology Requirement 9 cr

___(PSY) 101 General Psychology (3 cr) *
___(PHL) Philosophy Elective (3 cr) *
___(PSY) Psychology Elective (3 cr) *

Government Recommended 6 cr

___(GOV) 104 American Gov't: Constitutional & Political Foundations (3 cr)[2] *
___(GOV) 105 American Gov't: Institutions & Public Policies (3 cr)[3] *

Economics Recommended 3 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)[3] *

Anthropology Requirement 6 cr

___(ANT) 111 Cultural Anthropology (3 cr) *
___(ANT) Anthropology Elective (3 cr) (Recommended)*

Criminal Justice Requirement 3 cr

___(CRJ) 100 Introduction to Criminal Justice (3 cr)[2]

Math Requirement 4 cr

___(MAT) 170 Elem. Stat. for Social Science (4 cr)*

Geography Requirement 3 cr

___(GEO) Elective (3 cr)[4] *

Free Electives *** 24 cr**

**A 6 cr Sociology Internship may be arranged as part of these hours.[4]

***Special Interest Areas Available
Anthropology
Culture and Social Change
Family and Marriage
Social Problems
Gerontology
Human Relations
Social Institutional Organizations

Students interested in these areas should see the Department for more information.

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

YEAR 1	SOC 101 Principles of Sociology SOC 241 Contemp. Social Problems MAT 170 Elem. Stats for Social Science Literature Elective Category C General Education course Free Elective
YEAR 2	SOC 395 Intro. to Social Research CRJ 100 Intro to Criminal Justice ANT 111 Cultural Anthropology GOV 104 Am. Gov Philosophy Elective Category C General Education course PSY 101 General Psychology 2 Sociology Electives Free Elective
YEAR 3	SOC 254 Social Org. and Social Change 2 Sociology Electives ECN 101 Principles of Macroeconomics Psychology Elective GOV 105 Am. Gov Category C General Education course Category B General Education course Category B General Education course Free Elective
YEAR 4	SOC 450 Social Theory 2 Sociology Electives Geography Elective Anthropology Elective 5 Free Electives

Superscript numbers refer to the year it is recommended that the course be taken i.e. [1] = Freshman year, [2] = Sophomore etc.

SOCIOLOGY-GERONTOLOGY-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 170 Elem. Stats for Social Science
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(PHL) Philosophy Elective

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________________
___( )________________________
___( )________________________

C: Biological & Physical Sciences (9 cr)
___(BIO) 150 Human Biology
___( )________________________
___( )________________________

D: Political, Economic & Geographic Science (6 cr)
Recommended
___(GOV) 104 Am. Gov/Constitutional & Pol. Found.
___(ECN) 101 Principles of Macroeconomics

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(ANT) 111 Cultural Anthropology

III. General Education Electives 15 cr

___(PSY) Psychology Elective
___(GEO) Geography Elective
Recommended:
___(GOV) 105 Am. Gov/Institutions and Public Policy
___(ANT) Anthropology Elective
___(BIO) 203 Bio of Aging

Sociology Requirements 24 cr

___(SOC) 101 Principles of Sociology (3 cr)
___(SOC) 241 Contemporary Social Problems (3 cr)
___(SOC) 395 Introduction to Social Research (3 cr)
___(SOC) 254 Social Organization and Social Change (3 cr)
___(SOC) 450 Social Theory (3 cr)
___(SOC) Sociology Elective
___(SOC) Sociology Elective

Gerontology Core 18 cr

___(SOC) 249 Introduction to Social Gerontology (3 cr)
___(SOC) 272 Aging:Social Problems & Policies (3 cr)
___(SOC) 371 Social Dynamics of Aging (3 cr)
___(SOC) 471 Methods & Social Research in Aging (3 cr)

Philosophy/Psychology Requirement 9 cr

___(PSY) 101 General Psychology (3 cr) *
___(PHL) Philosophy Elective (3 cr) *
___(PSY) Psychology Elective (3 cr) *

Government Recommended 6 cr

___(GOV) 104 American Gov't: Constitutional & Political Foundations (3 cr)^{2} *
___(GOV) 105 American Gov't: Institutions & Public Policies (3 cr)^{3} *

Economics Recommended 3 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^{3} *

Anthropology Requirement 6 cr

___(ANT) 111 Cultural Anthropology (3 cr) *
___(ANT) Anthropology Elective (Recommended)

Criminal Justice Requirement 3 cr

___(CRJ) 100 Introduction to Criminal Justice (3 cr)^{2}

Math Requirement 4 cr

___(MAT) 170 Elem. Stat. for Social Science (4 cr)*

Geography Requirement 3 cr

___(GEO) Elective (3 cr)^{4} *

Free Electives 21 cr**

**A 6 cr Sociology Internship may be arranged as part of these hours.^{4}

*Major requirement fulfills General Education Credit(s)

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

YEAR 1 SOC 101 Principles of Sociology
SOC 241 Contemp. Social Problems
MAT 170 Elem. Stats for Social Science
Literature Elective
BIO 150 Human Biology
CRJ 100 Intro. to Criminal Justice

YEAR 2 SOC 395 Intro. to Social Research
SOC 249 Intro Soc Gerontology
SOC 272 Aging: Prob. and Policies
GOV 104 Am. Gov
Philosophy Elective
Category C General Education course
BIO 203 Bio of Aging
ANT 111 Cultural Anthropology
PSY 101 General Psychology
Free Elective

YEAR 3 SOC 254 Social Org. and Social Change
SOC 371 Soc Dynamics of Aging
Sociology Elective
Category B General Education course
Category B General Education course
ECN 101 Principles of Macroeconomics
Psychology Elective
GOV 105 Am. Gov
Category C General Education course
Free Elective

YEAR 4 SOC 450 Social Theory
SOC 471 Methods and Soc Res in Aging
Sociology Elective
Geography Elective
Anthropology Elective
5 Free Electives

Superscript numbers refer to the year it is recommended that the course be taken i.e. ^{1} = Freshman year, ^{2} = Sophomore etc

SOCIOLOGY-B.S. Ed.
Comprehensive Social Studies

General Education Requirements

I. Required Skills and Competencies 15 cr

- ___(ENG) 101 English Composition OR
  (ENG) 110 Advanced Placement English (3 cr)
  Student may need to take (ENG) 100 Basic Writing first, based on test results.
- ___(SPE) 100 Basic Oral Communication (3 cr)
- ___Mathematical Competency-Required
  (MAT) 170 Elem. Statistics for Social Science
- ___(HIS) 105 World History I (3 cr) AND
- ___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
CPS 105, ENG 223, or any PHL listed

B: Literary, Artistic & Cultural Traditions (9 cr)
- ___(ENG) Intro to Fiction, Drama, or Poetry
- ___(MUS) 121 Intro to Music
- ___(ART) Art Appreciation or Art History

C: Biological & Physical Sciences (9 cr)
- ___(ESS)___________________________
- ___(BIO)___________________________
- ___(CHM)___________________________

D: Political, Economic & Geographic Science (6 cr)
- ___(GEO) 101 World Geography OR
  103 Geography U.S. and Canada
- ___(ECN) 101 Principles of Macroeconomics

E: Social & Behavioral Science (6 cr)
- ___(ANT) 111 Cultural Anthropology OR
  211 Comparative Cultures
- ___(PSY) 101 General Psychology

III. General Education Electives 15 cr
- ___(GOV) 105 American Gov't: Institutions & Public Policies (3 cr)
- ___(PSY) Psychology Elective (3 cr)
- ___(GOV) 150 Intro. International Relations
- ___(GOV) 104 Am. Gov./Constitution & Pol. Found.
- ___(ECN) 102 Principles of Microeconomics

Sociology Requirements 24 cr
- ___(SOC) 101 Principles of Sociology (3 cr)
- ___(SOC) 241 Contemporary Social Problems (3 cr)
- ___(SOC) 243 Minority Groups (3 cr)
- ___(SOC) 352 Family & Society (3 cr)
- ___(SOC) 450 Social Theory (3 cr)
- ___(SOC) Elective (3 cr)
- ___(SOC) Elective (3 cr)
- ___(SOC) Elective (3 cr)

Psychology Requirement 3 cr
- ___(PSY) 101 General Psychology (3 cr) *

Government Requirement 9 cr
- ___(GOV) 104 American Gov't: Constitutional & Political Foundations (3 cr) *
- ___(GOV) 105 American Gov't: Institutions & Public Policies (3 cr) *
- ___(GOV) 150 Intro International Relations (3 cr) *

Economics Requirement 9 cr
- ___(ECN) 101 Principles of Macroeconomics (3 cr) *
- ___(ECN) 102 Principles of Microeconomics (3 cr) *
- ___(ECN) Elective (3 cr)

Anthropology/History Requirement 9 cr
- ___(ANT) 111 Cultural Anthropology (3 cr)*
- ___(HIS) 104 Recent History of the U.S. (3 cr) *
- ___(ANT) 121 Physical Anthropology (3 cr) *

Math Requirement 4 cr
- ___(MAT) 170 Elem. Stat. for Social Science (4 cr)*

Geography Requirement 9 cr
- ___(ESS) 111 Introduction to Atmosphere *
  OR
  (ESS) 110 Introduction to Geology *
- ___(GEO) 101 World Geography *
  OR
  (GEO) 103 Geography of U.S. & Canada (3 cr) *
- ___(GEO) 140 Cultural Geography (3 cr)

Professional Education Requirements 27 cr
- ___(PSY) 310 Educational Psychology (3 cr)
- ___(TCH) 205 American School (3 cr)
- ___(EDU) 310 Teaching of Social Studies I (3 cr)
- ___(EDU) 311 Teaching of Social Studies II (3 cr)

Must be taken concurrently
- ___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
- ___(EDU) 395 Professional Practicum (3 cr)

***Major requirement fulfills General Education Credit(s)**

Total Graduation Requirements **123 cr**

****

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

YEAR I SOC 101 Principles of Sociology
SOC 241 Contemp. Social Problems
MAT Elem Stats for Social Science
PSY 101 General Psychology

YEAR II SOC 243 Minority Groups
Government
Geography

100 observation hours required

SPANISH-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Amy math under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )___________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

C: Biological & Physical Sciences (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

D: Political, Economic & Geographic Science (6 cr)
___( )___________________________
___( )___________________________

E: Social & Behavioral Science (6 cr)
___( )___________________________
___( )___________________________

III. General Education Electives 12 cr

Spanish Major Requirements 27 cr

___(SPN) 200 Intro. to Reading and Translation (3 cr)
___(SPN) 150 Spanish Civilization & Culture (3 cr)
___(SPN) 202 Intermediate Spanish Conversation (3 cr)
___(SPN) 212 Spanish Grammar (3 cr)
___(SPN) 213 Advanced Composition & Stylistics (3 cr)
___(SPN) 360 Masterpieces of Spanish Literature (3 cr)
___(SPN) 361 Masterpieces of Spanish-Am. Literature (3 cr)
___(SPN) 302 Advanced Spanish Conversation (3 cr)
___(SPN) 309 Spanish Phonetics (3 cr)

Restricted Electives (Choose One) 3 cr

___(GEO) 201 Geography of Latin America (3 cr)
___(GOV) 465 Gov & Politics of Latin America (3 cr)
___(HIS) 236 History of Latin America (3 cr)
___(HIS) 360 History of Mexico (3 cr)
___(SPN) 400 Seminar: Adv. Studies in Spanish Language and Literature (3 cr)

Spanish Electives 6 cr

___(SPN)___________________________(3cr)
___(SPN)___________________________(3cr)

Free Electives 24 cr

Total Graduation Requirements 120 cr

* * *

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

YEAR I Any introductory languages courses necessary

SPANISH/ENGLISH-B.S. Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Amy math under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )____________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________
___( )____________________
___( )____________________

C: Biological & Physical Sciences (9 cr)
___( )____________________
___( )____________________
___( )____________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________
___( )____________________

E: Social & Behavioral Science (6 cr)
___( )____________________
___( )____________________

III. General Education Electives 12 cr

Spanish Major Requirements 27 cr

___(SPN) 200 Intro. to Reading and Translation (3 cr)
___(SPN) 150 Spanish Civilization & Culture (3 cr)
___(SPN) 202 Intermediate Spanish Conversation (3 cr)
___(SPN) 212 Spanish Grammar (3 cr)
___(SPN) 213 Advanced Composition & Stylistics (3 cr)
___(SPN) 360 Masterpieces of Spanish Literature (3 cr)
___(SPN) 361 Masterpieces of Spanish-Am. Literature (3 cr)
___(SPN) 302 Advanced Spanish Conversation (3 cr)
___(SPN) 309 Spanish Phonetics (3 cr)

Restricted Electives (Choose One) 3 cr

___(GEO) 201 Geography of Latin America (3 cr)
___(GOV) 465 Gov & Politics of Latin America (3 cr)
___(HIS) 236 History of Latin America (3 cr)
___(HIS) 360 History of Mexico (3 cr)
___(SPN) 400 Seminar: Adv. Studies in Spanish Language and Literature (3 cr)

Spanish Electives 6 cr

___(SPN)____________________(3cr)
___(SPN)____________________(3cr)

Professional Education Requirements 28-31 cr

___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)
___(EDU) 305 Applied Linguistics in Foreign Language Teaching (1 cr)
Must be taken together
___(EDU) 323 Teaching of Foreign Language I (3 cr)
___(EDU) 324 Teaching of Foreign Language II (3 cr)
___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Strongly recommended:
___(RDG) 329 Reading in the Content Areas (3 cr)

Courses Required for ML/English Double Certification 27 cr

___(ENG) 105 Literary Analysis (3 cr)
___(ENG) 233 Major American Writers 1650-1865 (3 cr)
___(ENG) 234 Major American Writers 1865-1945 (3 cr)
___(ENG) 236 Major British Writers 700-1789 (3 cr)
___(ENG) 237 Major British Writers 1789-1945 (3 cr)
___(ENG) 223 The Grammars of English (3 cr)
___(ENG) 209 Advanced Composition (3 cr)
___(ENG) 323 OR 324 Shakespeare (3 cr)
AND
One of the Following:
___(ENG) 467 Seminar in Drama (3 cr)
___(ENG) 468 Seminar in Fiction (3 cr)
___(ENG) 469 Seminar in Poetry (3 cr)

Electives: Strongly Recommended 6 cr

___(SPE) 255 Speech Criticism (3 cr)
___(EDU) 321 Teaching of English in Secondary Schools (3 cr)

Total Graduation Requirements 120+ cr

* * *

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

YEAR I Any introductory languages courses necessary

SPANISH B.S. Ed.

General Education Requirements
I. Required Skills and Competencies 15 cr
___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Recommended
Amy math under Category "A" of the Gen Ed Program
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr
A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___( )______________________________
___( )______________________________

E: Social & Behavioral Science (6 cr)
___( )______________________________
___( )______________________________

III. General Education Electives 12 cr

Spanish Major Requirements 27 cr
___(SPN) 200 Intro. to Reading and Translation (3 cr)
___(SPN) 150 Spanish Civilization & Culture (3 cr)
___(SPN) 202 Intermediate Spanish Conversation (3 cr)
___(SPN) 212 Spanish Grammar (3 cr)
___(SPN) 213 Advanced Composition & Stylistics (3 cr)
___(SPN) 360 Masterpieces of Spanish Literature (3 cr)
___(SPN) 361 Masterpieces of Spanish-Am. Literature (3 cr)
___(SPN) 302 Advanced Spanish Conversation (3 cr)
___(SPN) 309 Spanish Phonetics (3 cr)

Restricted Electives (Choose One) 3 cr
___(GEO) 201 Geography of Latin America (3 cr)
___(GOV) 465 Gov & Politics of Latin America (3 cr)
___(HIS) 236 History of Latin America (3 cr)
___(HIS) 360 History of Mexico (3 cr)
___(SPN) 400 Seminar: Adv. Studies in Spanish Language and Literature (3 cr)

Spanish Electives 6 cr
___(SPN)______________________________(3cr)
___(SPN)______________________________(3cr)

Professional Education Requirements 28-31 cr
___(PSY) 310 Educational Psychology (3 cr)
___(TCH) 205 American School (3 cr)
___(EDU) 305 Applied Linguistics in Foreign Language Teaching (1 cr)
Must be taken together
___(EDU) 323 Teaching of Foreign Language I (3 cr)
___(EDU) 324 Teaching of Foreign Language II (3 cr)
___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Strongly recommended:
___(RDG) 329 Reading in the Content Areas (3 cr)

Total Graduation Requirements 120+ cr

◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆

GPA Needed to Declare: 2.5

Recommended Sequence of Courses:

YEAR I Any introductory languages courses necessary

SPEECH COMMUNICATION-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Any math listed under category A of the Gen Ed program.
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )____________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

C: Biological & Physical Sciences (9 cr)
___( )____________________________
___( )____________________________
___( )____________________________

D: Political, Economic & Geographic Science (6 cr)
___( )____________________________
___( )____________________________

E: Social & Behavioral Science (6 cr)
___( )____________________________
___( )____________________________

III. General Education Electives 12 cr

Required Speech Communication Courses 18 cr

___(SPE) 101 Fundamentals of the Comm. Process (3 cr)
___(SPE) 200 Discussion (3 cr)
___(SPE) 351 Public Speaking (3 cr)

Choose one course
___(SPE) 212 Voice and Diction (3 cr)
___(SPE) 221 Oral Interpretation (3 cr)

Choose one course
___(SPE) 255 Speech Criticism (3 cr)
___(SPE) 303 Effective Listening (3 cr)

Choose one course
___(SPE) 402 Oral Communication Theory (3 cr)
___(SPE) 450 Development of Oral Persuasion (3 cr)

Group A and B (A + B = 9) 9 cr

Group A (1 or 2 courses)
___(SPE) 104 Introduction to Interpersonal Comm.(3 cr)
___(SPE) 205 Interviewing (3 cr)
___(SPE) 212 Voice and Diction (3 cr)**
___(SPE) 221 Oral Interpretation (3 cr)**
___(SPE) 303 Effective Listening (3 cr)**
___(SPE) 305 Problems in Interpersonal Comm. (3 cr)
___(SPE) 402 Oral Communication Theory (3 cr)**

GROUP B (A + B = 9)
___(SPE) 255 Speech Criticism (3 cr)**
___(SPE) 352 Debate (3 cr)
___(SPE) 353 American Public Address (3 cr)
___(SPE) 354 Contemporary Public Address (3 cr)
___(SPE) 450 Development of Oral Persuasion (3 cr)**

Group C (Choose 1 course) 3 cr
___(SPE) 121 Introduction to Theatre (3 cr)
___(SPE) 240 Dramatic Narrative Film (3 cr)

Group D (Choose 1 course) 3 cr
___(SPE) 160 Intergroup/Intercultural Communications (3 cr)
___(SPE) 271 Communication Dev. in Children (3 cr)
___(SPE) 355 Gender & Communication (3 cr)
___(SPE) 375 Resolving Conflict through Comm. (3 cr)

Additional Courses-Can be used in Groups A, B, C, OR D
___(SPE) 394 Speech Internship I (3 cr)
AND/OR
___(SPE) 397 Speech Internship II (3 cr)

**Can only be counted in Groups A and B if not taken under the required courses.

Free Electives 27 cr

Total Graduation Requirements 120 cr

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GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Year 1 SPE 101 Fundamentals of the Communication Process

Each student must select at least four (4) courses at or above the 300 level.

URBAN/RURAL STUDIES-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency
(MAT) 102 Introduction to Statistics OR
(Mat) 170 Elementary Stats. for Social Science OR
Pre-Calc OR Calculus I
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(GOV) 104 Am Gov: Constitutional & Political Found.
___(ECN)______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required Geography Courses 18 cr

___(GEO) 230 Economic Geography (3 cr)
___(GEO) 314 Industrial Geography (3 cr)
___(GEO) 322 Urban Geography (3 cr)
___(GEO) 444 Environmental Land Use Planning (3 cr)

Select 1 course:
___(GEO) 101 World Geography (3 cr)
___(GEO) 103 Geog. of U.S. and Canada (3 cr)
___(GEO) 140 Cultural Geography (3 cr)
___(ESS) 108 Conservation of Natural Resources (3 cr)

Select 1 course:
___(GEO) 310 Transportation Geography (3 cr)
___(GEO) 401 Geography of Tourism (3 cr)

Government Requirements 18 cr

___(GOV) 104 American Gov't: Constitutional & Political Foundations (3 cr) *
___(GOV) 203 State & Local Government (3 cr)
___(GOV) 208 Regional & Urban Planning (3 cr)
___(GOV) Elective (3 cr)
___(GOV) Elective (3 cr)
___(GOV) Elective (3 cr)

Economics Requirements * 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)
___(ECN) 102 Principles of Microeconomics (3 cr)
___(ECN) Elective (3 cr)

Sociology Requirements 12 cr

___(SOC) 101 Principles of Sociology (3 cr) *
___(SOC) Elective (3 cr)
___(SOC) Elective (3 cr)
___(SOC) Elective (3 cr)

Psychology/Philosophy Requirement 6 cr

___(PSY) 101 General Psychology (3 cr) *
AND
Select 1 course:
___(PHL) 101 Introduction to Philosophy (3 cr)
___(PHL) 301 Logic (3 cr)

Free Electives 6+ cr

***Major Requirement Fulfills General Education Credit(s)**

Total Graduation Requirements 120 cr

* * *

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

The first two semesters take a balanced load of geography, earth science, sociology, and government courses.

Wait until the sophomore year to begin economics courses.

Gen Eds should be completed as soon as possible.

College of Business

The College of Business

B.A.

Economics

B.S.B.A.

Accounting
Business Information Systems
Economics
Finance
General Management
International Management
Management Science
Marketing
Office Administration
Personnel Administration/
  Industrial Relations
Real Estate

B.S.Ed.

Business Education
- *Certification Areas*
  - Accounting
  - Data Processing
  - Marketing
  - Secretarial

Economics*

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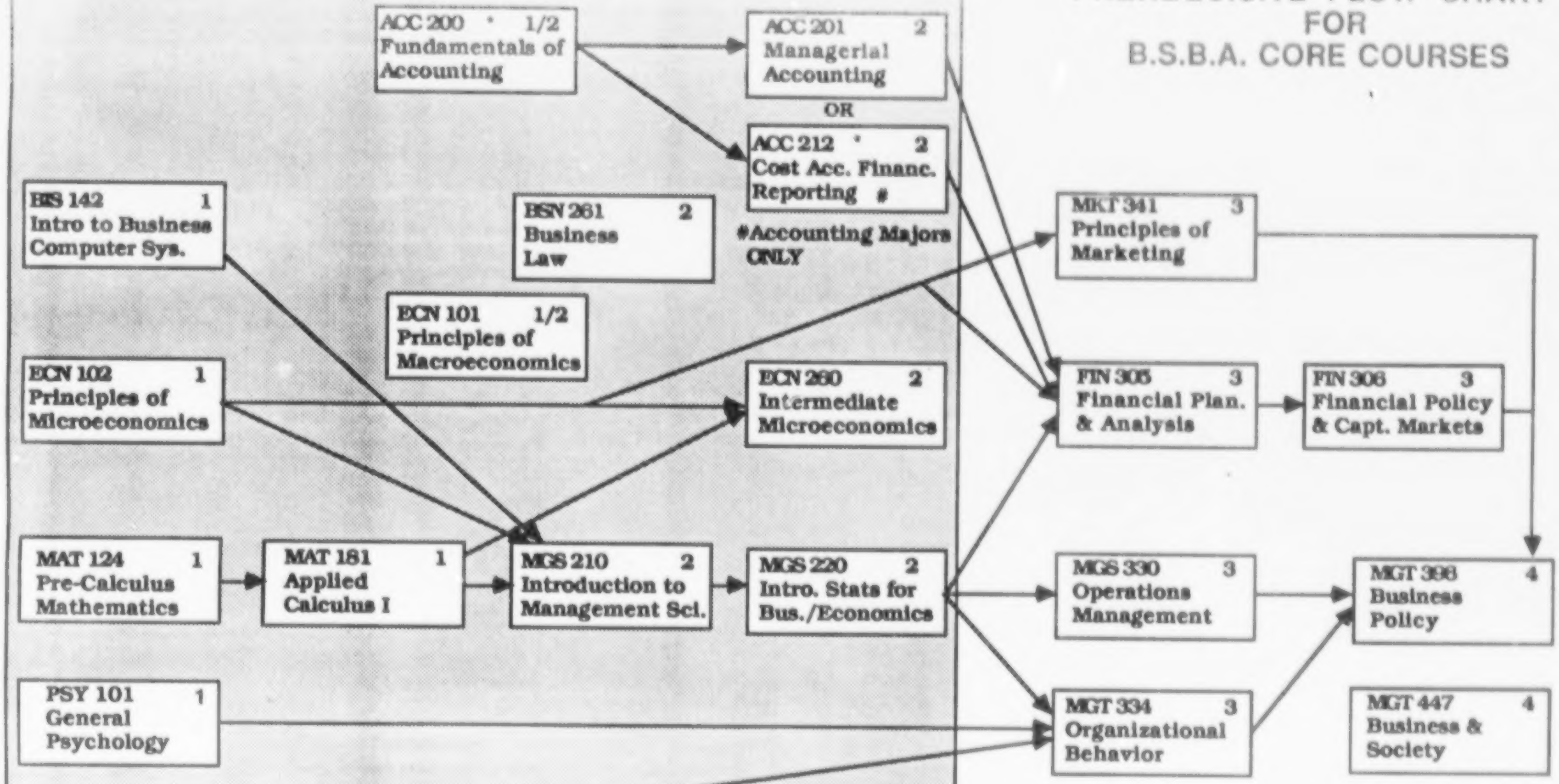
* Comprehensive Social Studies

PREREQUISITE FLOW CHART
FOR
B.S.B.A. CORE COURSES


ACC 200 * 1/2 Fundamentals of Accounting
ACC 201 2 Managerial Accounting
OR
ACC 212 * 2 Cost Acc. Financ. Reporting #
#Accounting Majors ONLY
BIS 142 1 Intro to Business Computer Sys.
BSN 261 2 Business Law
ECN 101 1/2 Principles of Macroeconomics
ECN 102 1 Principles of Microeconomics
ECN 260 2 Intermediate Microeconomics
MAT 124 1 Pre-Calculus Mathematics
MAT 181 1 Applied Calculus I
MGS 210 2 Introduction to Management Sci.
MGS 220 2 Intro. Stats for Bus./Economics
PSY 101 1 General Psychology
SOC 101 1 Principles of Sociology
MKT 341 3 Principles of Marketing
FIN 305 3 Financial Plan. & Analysis
FIN 306 3 Financial Policy & Capt. Markets
MGS 330 3 Operations Management
MGT 334 3 Organizational Behavior
MGT 398 4 Business Policy
MGT 447 4 Business & Society

REQUIREMENTS for Qualifying for Junior Status:
Complete a minimum of 55 credits, including ALL 100-200-level business core courses
Complete Introduction to Information Retrieval (Sign up for program in the Library)
Maintain a 2.0 cumulative average in ALL 100-200 -level business core courses and a 2.0 cumulative average overall.

*Accounting majors should take ACC 200 in their first semester and ACC 212 in the second semester of their sophomore year.

Sequence of Courses
1=Freshman year
2=Sophomore year
3=Junior year
4=Senior year

ADVISING STUDENTS WHO ARE INTERESTED IN BUSINESS

The College of Business offers you three different degree options, including: (1) a Bachelor of Science in Business Administration; (2) a Bachelor of Science in Business Education; and (3) a Bachelor of Arts in Economics.

Bachelor of Science in Business Administration (BSBA) Degree Program

The purpose of the BSBA degree program is to provide you with a knowledge base for a lifetime of learning in a professional career in business or government. Your coursework will provide you with an appreciation of the liberal arts, effective oral and written communication skills, knowledge and application of quantitative concepts, knowledge of microcomputer usage and applications, knowledge of the primary functional areas of business, and advanced coursework in your chosen major field of study. Like programs in science and engineering, the BSBA program is academically challenging, designed for those who are prepared and motivated to college level work.

The BSBA degree program consists of three components: specified general education requirements, the common BSBA core (required of all BSBA majors), and coursework in your selected major. As a prospective BSBA degree student, you are given the opportunity to select from 14 different majors. The major course sequence enables you to develop a specialization in a functional area of business beyond the knowledge base provided by the BSBA core. Before selecting a BSBA major in the College of Business, we encourage you to seek advice from a variety of different sources and base your decision on your own abilities and interests.

In order to declare a BSBA major, you must have at least a 2.4 cumulative grade point average, including a "C" or higher in MAT124 Precalculus Mathematics and/or MAT181 Applied Calculus I. During your freshman and sophomore years, you will be required to satisfactorily complete certain general education requirements, all the lower division business core courses (100/200 level), a library certification program, and be in good academic standing before progressing to your junior and senior year coursework. (Please refer to the University catalog for a more complete description of these requirements). In your remaining two years, you will complete your upper division business core courses (300/400 level), satisfy your major course requirements, and fulfill the remainder of your general education requirements. (Please refer to the University catalog since some variations exist between majors).

Junior and senior BSBA degree students, in good academic standing, are eligible and encouraged to participate in the Business Internship Program. You will be awarded academic credit for an internship, which gives you a semester or summer of practical business experience related to your major field of study. An internship is beneficial in a number of ways; it enables you to see the application of "theory" to "real life" situations; it enhances your job opportunities upon graduation; and, in most cases, provides remuneration which can apply towards your educational expenses.

Bachelor of Science in Business (BSED) Degree Program

Individuals interested in teaching as a profession are provided the opportunity to earn a business education degree. The program is designed to prepare you to teach entry-level vocational skills and socio-business knowledge in junior and senior high schools, intermediate schools, and the vocational-technical schools of the Commonwealth.

As a business education student, you must select two concentrations from four academic areas: secretarial (teacher certification in shorthand), accounting (teacher certification in accounting/bookkeeping), marketing (teacher certification in marketing/sales), data processing (teacher certification in data processing/information processing). In additional, all business education students receive certification in typing, economics, business law, clerical practice and machines, business English, and general business subjects.

Bachelor of Arts in Economics (BA) Degree Program

Economics as a social science is concerned with problems of efficiency and equity in contemporary society. The BA degree program in economics will provide you with a broad liberal arts background which will prepare you for a wide variety of career opportunities or for graduate study in economics, law, business, or government. The program offers a thorough grounding in economic theory combined with the opportunity to select from a wide variety of course offerings designed to meet your educational needs and career interests.

REQUIREMENTS FOR JUNIOR LEVEL STATUS IN BUSINESS

Any business student who plans to take a 300/400-level business course (excluding 300-400-level economics courses) must meet all of the following requirements:

1. A minimum of 55 credits must be completed, including all of the required 100-/200-level business core courses, as listed in the catalog. *

2. The library use certification program (Introduction to Information Retrieval OR Library Levels I & II) must be completed.

3. A 2.0 or better cumulative grade point average must be maintained in all courses taken, in all business core courses, and in all major courses which includes any business core courses under the major discipline.

   Due to the limited availability of economics courses, students will be allowed to complete ECN260 Intermediate Microeconomics during the first semester of the junior year.

Any student not meeting any one of the above stated requirements, will be officially withdrawn from his/her 300-/400-level business courses scheduled for the fall semester. These requirements will be enforced on a semester by semester basis beginning the fall semester of 1989.

Source: Winter, T.S. Assistant Dean, College of Business. Shippensburg University, Shippensburg, Pennsylvania, July, 1988.

MAJOR COURSE ELECTIVES

Please check the university catalog or consult your advisor and/or your respective department to identify prerequisite course requirements and to find out when these courses are offered. Some major electives are offered only once a year.

Any 300-/400-level elective courses offered within your major may not be taken until you have met all of the requirements for "Qualifying for Junior Status", as stated in the university catalog and as stated on the bottom of the "Prerequisite Flow Chart" on the back of page one of this worksheet.

Finance

ACC310	Financial Acctg. & Reporting I
ACC311	Financial Acctg. & Reporting II
ACC312	Cost Determination & Analysis
ACC401	Financial Acctg. & Reporting III
ACC412	Advanced Cost Analysis & Control
ACC418	Acctg. Info. & Control Systems
ECN270	Intermed. Macroeconomic Theory
ECN305	Money & Banking
ECN310	Public Finance
FIN340	Principles of Real Estate
FIN393	Selected Topics in Finance
FIN405	Real Estate Appr & Invest Anly.
FIN412	Speculative Markets
FIN414	Bank Management
FIN415	Finan. Intern'l Bus. Operations
FIN490	Selected Topics in Finance
MGS340	Adv. Stats. for Bus. & Economics
MGS355	Management Information Systems
MGS360	Management Simulation Modeling
MGS470	Prod. Plan. & Inven. Control I
MGS475	Prod. Plan. & Inven. Control II
MGS480	Business Forecasting

General Management

MGT350	Principles of Labor Relations
MGT434	Innovation, Change & Development
MGT440	Entrep. & Small Bus. Management
MGT460	International Management
MGT465	Bus. Decision-Making Laboratory
MGT490	Selected Topics in Management
MKT448	Logistics Management
*MKT343	Principles of Retailing
*MKT345	Sales Management
*MKT460	International Marketing

*Only one of these marketing courses may be used to fulfill course elective requirements.

International Management

ECN319	International Economics: Theory
ECN321	International Economics: Policy
GEO140	Cultural Geography
GOV301	Internat'l Law and Organization
MGT434	Innovation, Change, and Develop.

Marketing

MKT343	Principles of Retailing
MKT344	Advertising
MKT345	Sales Management
MKT346	Personal Selling
MKT348	Promotional Strategy
MKT443	Retail Problems and Policies
MKT445	Seminar in Sales Management
MKT448	Logistics Management
MKT455	Seminar in Advertising
MKT460	International Marketing
MKT470	Services Mktg. & Nonprofit Mktg.
MKT490	Selected Topics in Marketing
MGT440	Entrep. and Small Bus. Management

Transportation & Logistics

GEO314	Industrial Geography
MGT350	Principles of Labor Relations
MGS350	Decision Support Program Dev.
MGS360	Management Simulation Modeling
MKT345	Sales Management

ACCOUNTING-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 181 Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________________
___( )________________________
___( )________________________

C: Biological & Physical Sciences (9 cr)
___( )________________________
___( )________________________
___( )________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( )________________________
___( )________________________

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 27 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 212 Cost Accounting/Financial Reporting/ Managerial Decision Making (3 cr)
___(ACC) 304 Auditing (3 cr)
___(ACC) 306 Tax Accounting (3 cr)
___(ACC) 310 Financial Accounting & Reporting I (3 cr)
___(ACC) 311 Financial Accounting & Reporting II (3 cr)
___(ACC) 312 Cost Determination & Analysis (3 cr)
___(ACC) 401 Financial Accounting & Reporting III (3 cr)
___(ACC) 418 Accounting Info. & Control Systems (3 cr)

Business Info. System/General Business Requirement 6 cr

___(BIS) 142 Introduction to Business Computer Sys.(3 cr)
___(BSN) 261 Business Law I (3 cr)

Economics Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^2 *
___(ECN) 102 Principles of Microeconomics (3 cr)^1 *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^1 *
___(MAT) 181 Applied Calculus (3 cr)^1 *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^1 *
___(SOC) 101 Principles of Sociology (3 cr)^1 *

Marketing Requirement 3 cr

___(MKT) 341 Principles of Marketing (3 cr)^3

Management Requirements 9 cr

___(MGT) 334 Organizational Behavior (3 cr)^3
___(MGT) 396 Business Policy (3 cr)^4
___(MGT) 447 Business & Society (3 cr)^4

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)
___(MGS) 220 Intro. Statistics/Business & Economics (3 cr)
___(MGS) 330 Operations Management (3 cr)^3

Finance Requirements 6 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^3
___(FIN) 306 Financial Policy & Capital Markets (3 cr)^3

Free Electives 3 cr

___( )____________________________(3 cr)

Total Graduation Requirements 123 cr

*Major requirement fulfills General Education credit(s)

* * *

GPA Needed to Declare: 2.0
NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended	*Sequence of Courses:*
Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 212 Cost Accounting (Managerial Acct. is for Non-Accounting majors) MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:
Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

Acct. Majors should have access to their own computer by the beginning of the Sophomore Year.

BUSINESS EDUCATION - B.S. Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 102 Introduction to Statistics
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________
___( )______________________
___( )______________________

C: Biological & Physical Sciences (9 cr)
___( )______________________
___( )______________________
___( )______________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )______________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

___(ACC) 201 Managerial Accounting (3 cr)
___(BSN) 261 Business Law I (3 cr)
___(MKT) 341 Principles of Marketing (3 cr)
___(ECN) 102 Principles of Microeconomics (3 cr)

Business Ed. & Office Administration Requirements 12 cr

___(BUS) 101 Business Mathematics I (3 cr)
___(BUS) 213 Adv Typewriting & Office Equipment (3 cr)
___(BUS) 218 Communications Processing (3 cr)
___(BUS) 305 Business Information Processing I (3 cr)

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Marketing & Business Info. Systems Requirements 6 cr

___(BIS) 142 Intro to Business Computer Systems (3 cr)
___(MKT) 341 Principles of Marketing (3 cr)

Management/& General Business Requirement 6 cr

___(BSN) 261 Business Law I (3 cr)
___(MGT) 447 Business & Society (3 cr)

Mathematics Requirement 3 cr

___(MAT) 102 Introduction to Statistics (3 cr) *

Sociology and Psychology Requirements 9 cr

___(SOC) 101 Principles of Sociology (3 cr) *
___(PSY) 101 General Psychology (3 cr) *

Economics Requirements 3 cr

___(ECN) 101 Principles of Macroeconomics (3 cr) *
___(ECN) 102 Principles of Microeconomics (3 cr) *

Certification Areas 12 cr

Two Certification Areas must be chosen

___(ACC) 301 Intermediate Accounting I (3 cr)
___(ACC) 306 Tax Accounting (3 cr)

___(BIS) 243 Business Programming (3 cr)
___(BIS) 344 Business Systems Analysis & Design (3 cr)

___(MKT) 343 Principles of Retailing (3 cr)
___(MKT) 346 Personal Selling (3 cr)

___(BUS) 201 Shorthand I (3 cr)
___(BUS) 202 Shorthand II (3 r)

Prerequisites for Professional Semester 6 cr

___(EDU) 205 American School (3 cr)
___(PSY) 310 Educational Psychology (3 cr)

Professional Education Requirements 13 cr

Professional Semester (prior to student teaching)
___(EDU) 370 Utilization of Instructional Media (2 cr)
___(EDU) 330 Methods of Teaching Business Ed (3 cr)
___(EDU) 301 Evaluative Techniques & Guidance (2 cr)
___(BUS) 220 American Business Systems (3 cr)
___(BUS) 306 Business Information Processing II (3 cr)

Student Teaching 15 cr

___(EDU) 390 Student Teaching & Direction of Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Total Graduation Requirements 120+ cr

***Major requirement fulfills General Education credit(s)**

****

GPA Needed to Declare: 2.0 *

**NOTE: All business courses MUST be completed with a "C" average or better before students can transfer into this program. Also, students must have a 2.5 GPA overall before the methods block and the student teaching experience.*

Recommended Sequence of Courses:

Year I	PSY 101 General Psychology SOC 101 Principles of Sociology MAT 102 Intro to Statistics ECN 101 Principles of Macroeconomics ECN 102 Principles of Microeconomics BIS 142 Intro to Business Computer Systems

Business Math should be taken in the second semester of the sophomore year.

BUSINESS INFORMATION SYSTEMS-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___(MAT) 181 Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________
___( )______________________
___( )______________________

C: Biological & Physical Sciences (9 cr)
___( )______________________
___( )______________________
___( )______________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )______________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( )______________________
___( )______________________

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

General Business Requirement 3 cr

___(BSN) 261 Business Law I (3 cr)

Marketing Requirement 3 cr

___(MKT) 341 Principles of Marketing (3 cr)^{3}

Economic Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^{2} •
___(ECN) 102 Principles of Microeconomics (3 cr)^{1} •
___(ECN) 260 Intermediate Microeconomics Theory (3 cr)^{2} •

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^{1} •
___(MAT) 181 Applied Calculus (3 cr)^{1} •

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^{1} •
___(SOC) 101 Principles of Sociology (3 cr)^{1} •

Finance Requirement 6 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^{3}
___(FIN) 306 Financial Policy & Capital Markets (3 cr)^{3}

Management Requirements 9 cr

___(MGT) 334 Organizational Behavior (3 cr)^{3}
___(MGT) 396 Business Policy (3 cr)^{4}
___(MGT) 447 Business & Society (3 cr)^{4}

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)^{2}
___(MGS) 220 Intro. Statistics/Business & Economics (3 cr)^{2}
___(MGS) 330 Operations Management (3 cr)^{3}

Business Information Systems Requirements 21 cr

___(BIS) 142 Intro/Business Computer Sys.(3 cr)^{1}
___(BIS) 243 Business Programming (3 cr)
___(BIS) 244 Adv. Programming Concepts & Tools (3 cr)
___(BIS) 344 Business Systems Analysis & Design (3 cr)
___(BIS) 355 Data Base Applications (3 cr)
___(BIS) 420 Telecommunications/Distrib. Processing (3 cr)
___(BIS) 446 Total Information Systems (3 cr)

Free Elective 3 cr

___( )______________________(3 cr)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s)

* * *

GPA Needed to Declare: 2.0

NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended	***Sequence of Courses:***
Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting- MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:

Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

ECONOMICS-B.A.

General Education Requirements
I. Required Skills and Competencies 15 cr
___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus OR Calculus I
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr
A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 181 Applied Calculus I OR
212 Calculus II

B: Literary, Artistic & Cultural Traditions (9 cr)
___(ART) Art Appreciation
___(MUS) Introduction to Music
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(GOV) 104 Am Gov: Const. & Pol Foundations OR
105 Am. Gov: Inst. & Public Pol.
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(SOC) 101 Principles of Sociology
___( )______________________________

III. General Education Electives 12 cr
___(GOV) 105 Am Gov: Inst. & Public Policies (3 cr)
OR
(GOV) 104 Am Gov: Const. & Public Pol.
___(GOV) Government Elective (200 or above) (3 cr)
___( ) Sociology OR Geography Elective (3 cr)
___( )______________________________(3 cr)

Economics Requirements 30 cr
CORE COURSES
___(ECN) 101 Principles of Macroeconomics (3 cr) *
___(ECN) 102 Principles of Microeconomics (3 cr) *
___(ECN) 260 Intermediate Microeconomic Theory (3 cr)
___(ECN) 270 Intermediate Macroeconomic Theory (3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)

Mathematics Requirement 6 or 8 cr
___(MAT) 124 Pre-Calculus Mathematics (3 cr) *
OR
(MAT) 211 Calculus I (4 cr) *

___(MAT) 182 Applied Calculus (3 cr) *
OR
(MAT) 212 Calculus II (3 cr) *

Required Management Science OR Mathematics 6 cr
___(MGS) 226 Management & Economic Statistics (3 cr)
AND
Choose one:
___(MGS) 210 Introduction to Management Science (3 cr)
OR
___(MAT) 380 Probability & Statistics (3 cr)

Music and Art Requirements 6 hr
___(MUS) 121 Introduction to Music *
___(ART) 101 Introduction to Art *

Government Requirements 9 cr
___(GOV) 104 Am Gov: Const. & Political Found (3 cr) *
___(GOV) 105 Am Gov: Inst. & Public Policies (3 cr) *
___(GOV)______________________________(3 cr) *

Sociology OR Geography Requirements 6 cr
___(SOC) 101 Principles of Sociology (3 cr) *
___( ) Sociology OR Geography Elective (3 cr) *

Free Electives 11 cr

Total Graduation Requirements 120 cr

***Major requirement fulfills General Education credit(s)**

****

GPA Needed to Declare: 2.0
NOTE: A grade of "C" or better in Pre-Calculus or Calculus I is required.

Recommended Sequence of Courses:

Year 1 Mathematics Requirement
ECN 101 Macroeconomics and/or Ecn 102 Microeconomics

NOTE: Economic majors are NOT permitted to take ECN 201 The Labor Force for credit.

ECONOMICS-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )____________________
___( )____________________
___( )____________________

C: Biological & Physical Sciences (9 cr)
___( )____________________
___( )____________________
___( )____________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )____________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( )____________________
___( )____________________

Library Certification Requirement

Introduction to Informational Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Business Info. System/General Business Requirement 6 cr

___(BIS) 142 Introduction to Business Computer Sys (3 cr)
___(BSN) 261 Business Law I (3 cr)

Economics Requirements 24 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^2 *
___(ECN) 102 Principles of Microeconomics (3 cr)^1 *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *
___(ECN) 270 Intermediate Macroeconomic Theory (3 cr)
___(ECN)____________________(3 cr)
___(ECN)____________________(3 cr)
___(ECN)____________________(3 cr)
___(ECN)____________________(3 cr)

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^1 *
___(MAT) 181 Applied Calculus (3 cr)^1 *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^1 *
___(SOC) 101 Principles of Sociology (3 cr)^1 *

Marketing Requirement 3 cr

___(MKT) 341 Principles of Marketing (3 cr)^3

Management Requirements 9 cr

___(MGT) 334 Organizational Behavior (3 cr)^3
___(MGT) 396 Business Policy (3 cr)^4
___(MGT) 447 Business & Society (3 cr)^4

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)
___(MGS) 220 Introd. Stats/Business & Economics (3 cr)
___(MGS) 330 Operations Management (3 cr)^3

Finance Requirements 6 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^3
___(FIN) 306 Financial Policy & Capital Markets (3 cr)^3

Free Electives 3 cr

___( )____________________(3r)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s)

◆◆◆

GPA Needed to Declare: 2.0

NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended Sequence of Courses:

Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:

Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

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ECONOMICS-B.S.Ed.
Comprehensive Social Studies

General Education Requirements
I. Required Skills and Competencies 15 cr
___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus (Advanced Students may substitute Calculus I)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr
A: Language/Numbers for Rational Thinking (3 cr)
Strongly Recommended
___(MAT) 182 Applied Calculus (If Pre-Calc taken)
OR
(MAT) 212 Calculus II (If Calc I taken)

B: Literary, Artistic & Cultural Traditions (9 cr)
___(ART) 101 Art Appreciation
___(MUS) 121 Introduction to Music
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___(ESS) 110 Intro to Geology
OR
(ESS) 111 Intro to Atmosphere
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(GOV) 104 Am Gov: Const. & Pol Found.
___(ECN) 101 Principles of Macroeconomics

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 15 cr
___(GOV) 105 Am Gov.: Inst. & Public Policies (3 cr)
___(GEO) 101 World Geography (3 cr)
___(ANT) 111 Cultural Anthropology (3 cr)
___(HIS) 301 American Economic History (3 cr)
___(GEO) 230 Economic Geography (3 cr)

Economics Requirements 24 cr
___(ECN) 101 Principles of Macroeconomics (3 cr)
___(ECN) 102 Principles of Microeconomics (3 cr)
6 Economic Electives
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
___(ECN)______________________________(3 cr)
Strongly Recommended:
(ECN) 260 Intermediate Microeconomic Theory (3 cr)
(ECN) 270 Intermediate Macroeconomic Theory (3 cr)
(Intermediate Micro required Calc I or Business Admin Math as a prereq.)

Mathematics Requirement 3 cr
___(MAT) 124 Pre-Calculus Mathematics (3 cr) *
Strongly Recommended: A second Math course
___(MAT) 182 Applied Calculus (3 cr)-or substitute *

Government Requirements 9 cr
___(GOV) 104 American Government: Const. & Political Foundations (3 cr) *
___(GOV) 105 American Government: Inst. & Public Policies (3 cr) *
___(GOV)______________________________(3cr)

Sociology and Psychology Requirements 12 cr
___(SOC) 101 Principles of Sociology (3 cr) *
___(SOC)______________________________(3 cr)
___(PSY) 101 General Psychology (3 cr) *
___(PSY)______________________________(3 cr)

History and Anthropology Requirements 9 cr
___(HIS) 104 Recent History of the United States (3 cr)
___(HIS) 301 American Economic History (3 cr) *
___(ANT) 111 Cultural Anthropology (3 cr) *

Geography Requirements 6 cr
___(GEO) 101 World Geography (3 cr) *
___(GEO) 230 Economic Geography (3 cr) *

Professional Education Requirements 27 cr
___(PSY) 310 Educational Psychology (3 cr)
___(EDU) 205 American School (3 cr)
___(EDU) 310 Teaching of Social Studies I (3 cr)
___(EDU) 311 Teaching of Social Studies II (3 cr)
___(EDU) 390 Student Teach. & Direction/Learning Activities (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

*Major requirement fulfills General Education credit(s)

Total Graduation Requirements 120+cr

◆◆

GPA Needed to Declare: 2.5
A grade of "C" or better in Pre-Calculus is required.

Recommended Sequence of Courses:

Semester I
MAT 124 Pre-Calculus
SOC 101 Sociology or
PSY 101 Psychology
ECN 101 Macroeconomics or
ENC 102 Microeconomics

NOTE: Economic majors are NOT permitted to take ECN 201 The Labor Force for credit.

FINANCE-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr
___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr
A: Language/Numbers for Rational Thinking (3 cr)
___(MAT) Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________________
___( )________________________
___( )________________________

C: Biological & Physical Sciences (9 cr)
___( )________________________
___( )________________________
___( )________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles fo Sociology

III. General Education Electives 12 cr
Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( )________________________
___( )________________________

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Business Info. System & General Business Requirement 6 cr

___(BIS) 142 Intro. to Business Computer Systems (3 cr)
___(BSN) 261 Business Law I (3 cr)

Economic Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^{2} *
___(ECN) 102 Principles of Microeconomics (3 cr)^{1} *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^{1} *
___(MAT) 181 Applied Calculus (3 cr)^{1} *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^{1} *
___(SOC) 101 Principles of Sociology (3 cr)^{1} *

Marketing Requirement 3 cr

___(MKT) 341 Principles of Marketing (3 cr)^{3}

Management Requirements 9 cr

___(MGT) 334 Organizational Behavior (3 cr)^{3}
___(MGT) 396 Business Policy (3 cr)^{4}
___(MGT) 447 Business & Society (3 cr)^{4}

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)
___(MGS) 220 Introd. Stats/Business & Economics (3 cr)
___(MGS) 330 Operations Management (3 cr)^{3}

Finance Requirements 24 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^{3}
___(FIN) 306 Financial Policy & Capital Markets (3 cr)^{3}
___(FIN) 312 Security Analysis (3 cr)
___(FIN) 313 Advanced Financial Management (3 cr)
___(FIN) 314 Financial Institutions (3 cr)
3 Finance Electives - See electives sheet
___(FIN)________________________(3r)
___(FIN)________________________(3r)
___(FIN)________________________(3r)

Free Electives 3 cr

___( )________________________(3 cr)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s)

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GPA Needed to Declare: 2.0
NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended Sequence of Courses:

Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:
Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

GENERAL MANAGEMENT-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( )______________________________
___( )______________________________

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 3000/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Business Info System/General Business Requirement 6cr

___(BIS) 142 Intro to Business Computer Systems (3 cr)
___(BSN) 261 Business Law I (3 cr)

Economic Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^{2} *
___(ECN) 102 Principles of Microeconomics (3 cr)^{1} *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^{1} *
___(MAT) 181 Applied Calculus (3 cr)^{1} *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^{1} *
___(SOC) 101 Principles of Sociology (3 cr)^{1} *

Marketing Requirement 3 cr

___(MKT) 341 Principles of Marketing (3 cr)^{3}

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)
___(MGS) 220 Introd. Statistics/Business & Economics (3 cr)
___(MGS) 330 Operations Management (3 cr)^{3}

Finance Requirements 6 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^{3}
___(FIN) 306 Financial Policy & Capital Markets (3 cr)^{3}

Management Requirements 27 cr

___(MGT) 334 Organizational Behavior (3 cr)^{3}
___(MGT) 396 Business Policy (3 cr)^{4}
___(MGT) 447 Business & Society (3 cr)^{4}
___(MGT) 332 Personnel Management (3 cr)
5 General Mgt. Electives-see electives sheet
___(MGT)______________________________(3 cr)
___(MGT)______________________________(3 cr)
___(MGT)______________________________(3 cr)
___(MGT)______________________________(3 cr)
___(MGT)______________________________(3 cr)

Free Electives 3 cr

___( )______________________________(3 cr)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s)

◆◆

GPA Needed to Declare: 2.0
NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended	*Sequence of Courses:*
Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:
Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Sysems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

HUMAN RESOURCE MANAGEMENT-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 181 Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___(   )______________________________
___(   )______________________________
___(   )______________________________

C: Biological & Physical Sciences (9 cr)
___(   )______________________________
___(   )______________________________
___(   )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___(   )______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___(ECN) 201 The Labor Force (3 cr)
___(HIS) 309 American Labor Movement (3 cr)

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Business Info System/General Business Requirement 6 cr

___(BIS) 142 Intro to Business Computer Systems (3 cr)
___(BSN) 261 Business Law I (3 cr)

Economic Requirements 12 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^2 *
___(ECN) 102 Principles of Microeconomics (3 cr)^1 *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *
___(ECN) 201 The Labor Force (3 cr)

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^1 *
___(MAT) 181 Applied Calculus (3 cr)^1 *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^1 *
___(SOC) 101 Principles of Sociology (3 cr)^1 *

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)
___(MGS) 220 Introd. Statistics/Business & Economics (3 cr)
___(MGS) 330 Operations Management (3 cr)^3

Finance Requirements 6 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^3
___(FIN) 306 Financial Policy & Capital Markets (3 cr)^3

Marketing and History Requirements 6 cr

___(MKT) 341 Principles of Marketing (3 cr)^3
___(HIS) 309 American Labor Movement (3 cr)

Management Requirements 27 cr

___(MGT) 334 Organizational Behavior (3 cr)^3
___(MGT) 396 Business Policy (3 cr)^4
___(MGT) 447 Business & Society (3 cr)^4
___(MGT) 332 Personnel Managment (3 cr)
___(MGT) 335 Labor Law (3 cr)
___(MGT) 336 Employment Law (3 cr)
___(MGT) 350 Principles of Labor Relations (3 cr)
___(MGT) 352 Advanced Industrial Relations (3 cr)
___(MGT) 357 Compensation Administration (3 cr)

Free Electives 3 cr

___(   )______________________________(3 cr)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s)

◆◆◆

GPA Needed to Declare: 2.0
NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended Sequence of Courses:

Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:
Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

INTERNATIONAL MANAGEMENT-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 181 Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( ) Language
___( ) Language

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Business Info System/General Business Requirement 6 cr

___(BIS) 142 Intro to Business Computer Systems (3 cr)
___(BSN) 261 Business Law I (3 cr)

Economic Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^{2} *
___(ECN) 102 Principles of Microeconomics (3 cr)^{1} *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr)

Math & Marketing Requirement 12 cr

___(MAT) 124 Pre-Calculus (3 cr)^{1} *
___(MAT) 181 Applied Calculus (3 cr)^{1} *
___(MKT) 341 Principles of Marketing (3 cr)^{3}
___(MKT) 460 International Marketing (3 cr)

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^{1} *
___(SOC) 101 Principles of Sociology (3 cr)^{1} *

Finance Requirements 9 cr

___(FIN) 305 Financial Planning & Anlysis (3 cr)^{3}
___(FIN) 306 Financial Policy & Capital Markets (3 cr)^{3}
___(FIN) 415 Financing Internat. Business Oper. (3 cr)

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)
___(MGS) 220 Intro Stats/Business & Economics (3 cr)
___(MGS) 330 Operations Management (3 cr)^{3}

Management Requirements 15 cr

___(MGT) 334 Organizational Behavior (3 cr)^{3}
___(MGT) 396 Business Policy (3 cr)^{4}
___(MGT) 447 Business & Society (3 cr)^{4}
___(MGT) 332 Personnel Management (3 cr)
___(MGT) 460 International Management (3 cr)

International Management Electives-See Electives 6 cr

___( )______________________________(3 cr)
___( )______________________________(3 cr)

Language Requirement (Beyond Elementary Level) 12 cr

___( )Language______________________(3 cr) *
___( )Language______________________(3 cr) *
___( )Language______________________(3 cr)
___( )Commercial Language__________(3 cr)
Student must pass ACTFL Oral Competency Test

Free Electives 3 cr

___( )______________________________(3 cr)

Total Graduation Requirements 120+cr

***Major requirement fulfills General Education credit(s)**

* * *

GPA Needed to Declare: 2.0

NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended Sequence of Courses:

Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:

Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

MANAGEMENT SCIENCE-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 181 Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( )______________________________
___( )______________________________

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 212 Cost Accounting/Financial Reporting/
Management Decision Making (3 cr)

Business Info System/General Business Requirement 6 cr

___(BIS) 142 Intro to Business Computer Systems (3 cr)
___(BSN) 261 Business Law I (3 cr)

Economic Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^{2} *
___(ECN) 102 Principles of Microeconomics (3 cr)^{1} *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *^{2}

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^{1} *
___(MAT) 181 Applied Calculus (3 cr)^{1} *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^{1} *
___(SOC) 101 Principles of Sociology (3 cr)^{1} *

Marketing Requirement 3 cr

___(MKT) 341 Principles of Marketing (3 cr)^{3}

Management Requirements 9 cr

___(MGT) 334 Organizational Behavior (3 cr)^{3}
___(MGT) 396 Business Policy (3 cr)^{4}
___(MGT) 447 Business & Society (3 cr)^{4}

Finance Requirements 6 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^{3}
___(FIN) 306 Financial Policy/Capital Markets (3 cr)^{3}

Management Science Requirements 30 cr

___(MGS) 210 Introduction to Management Science (3 cr)^{2}
___(MGS) 220 Introd. Stat/Business & Economics (3 cr)^{2}
___(MGS) 330 Operations Management (3 cr)^{3}
___(MGS) 340 Advanced Statistics for Business and
Economics (3 cr)^{3}
___(MGS) 350 Decision Support Program Dev (3 cr)^{3}
___(MGS) 355 Management Information Systems (3 cr)
___(MGS) 360 Management Simulation Modeling (3 cr)
___(MGS) 470 Production Planning & Inventory
Control I (3 cr)
___(MGS) 480 Business Forecasting (3 cr)
___(MGS) Elective (3 cr)^{4}

Free Elective 3 cr

___( )______________________________(3 cr)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s)

* * *

GPA Needed to Declare: 2.0

NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended Sequence of Courses:

Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 212 Cost Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:

Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

Management Science majors should have access to a computer by the beginning of their Sophomore year.

MARKETING-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 181 Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( )______________________________
___( )______________________________

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Business Info System/General Business Requirement 6 cr

___(BIS) 142 Intro to Business Computer Systems (3 cr)
___(BSN) 261 Business Law I (3 cr)

Economic Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^{2} *
___(ECN) 102 Principles of Microeconomics (3 cr)^{1} *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^{1} *
___(MAT) 181 Applied Calculus (3 cr)^{1} *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^{1} *
___(SOC) 101 Principles of Sociology (3 cr)^{1} *

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)
___(MGS) 220 Introd. Stat/Business & Economics (3 cr)
___(MGS) 330 Operations Management (3 cr)^{3}

Finance Requirements 6 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^{3}
___(FIN) 306 Financial Policy & Capital Markets (3 cr)^{3}

Management Requirements 9 cr

___(MGT) 334 Organizational Behavior 3 cr)^{3}
___(MGT) 396 Business Policy (3 cr)^{4}
___(MGT) 447 Business & Society (3 cr)^{4}

Marketing Requirements 21 cr

___(MKT) 341 Principles of Marketing (3 cr)^{3}
___(MKT) 441 Marketing Strategies & Management (3 cr)
___(MKT) 442 Consumer Analysis (3 cr)
___(MKT) 449 Marketing Research (3 cr)
Three (3) Marketing Electives-See Electives Sheet
___(MKT)______________________________(3 cr)
___(MKT)______________________________(3 cr)
___(MKT)______________________________(3 cr)

Free Electives 3 cr

___( )______________________________(3 cr)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s)

◆◆◆

GPA Needed to Declare: 2.0
NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended Sequence of Courses:

Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:
Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

OFFICE ADMINISTRATION-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

- ___(ENG) 101 English Composition OR
  - (ENG) 110 Advanced Placement English (3 cr)
  - Student may need to take (ENG) 100 Basic Writing first, based on test results.
- ___(SPE) 100 Basic Oral Communication (3 cr)
- ___Mathematical Competency-Required
  - (MAT) 124 Pre-Calculus
- ___(HIS) 105 World History I (3 cr) AND
- ___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)

____(MAT) 181 Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)

___( )______________________________

___( )______________________________

___( )______________________________

C: Biological & Physical Sciences (9 cr)

___( )______________________________

___( )______________________________

___( )______________________________

D: Political, Economic & Geographic Science (6 cr)

___(ECN) 101 Principles of Macroeconomics

___( )______________________________

E: Social & Behavioral Science (6 cr)

___(PSY) 101 General Psychology

___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Required by major:

___(ECN) 102 Principles of Microeconomics

___(ECN) 260 Intermediate Microeconomic Theory

___( )______________________________

___( )______________________________

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)

___(ACC) 201 Managerial Accounting (3 cr)

Business Info System/General Business Requirement 12 cr

___(BIS) 142 Intro to Business Computer Systems (3 cr)

___(BIS) 243 Business Programming (3 cr)

___(BSN) 261 Business Law I (3 cr)

___(BIS) 344 Bus Systems Analysis & Design (3 cr)

Business Ed. & Office Administration Requirements 12 cr

___(BUS) 204 Business Communications (3 cr)

___(BUS) 305 Business Info. Processing I (3 cr)

___(BUS) 306 Business Info. Processing II (3 cr)

___(BUS) 346 Administrative Office & Personnel Management (3 cr)

Economic Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)[2] *

___(ECN) 102 Principles of Microeconomics (3 cr)[1] *

___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)[1] *

___(MAT) 181 Applied Calculus (3 cr)[1] *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)[1] *

___(SOC) 101 Principles of Sociology (3 cr)[1] *

Marketing Requirement 3 cr

___(MKT) 341 Principles of Marketing (3 cr)[3]

Management Requirements 9 cr

___(MGT) 334 Organizational Behavior (3 cr)[3]

___(MGT) 396 Business Policy (3 cr)[4]

___(MGT) 447 Business & Society (3 cr)[4]

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)

___(MGS) 220 Introd. Stats/Business & Economics (3 cr)

___(MGS) 330 Operations Management (3 cr)[3]

Finance Requirements 6 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)[3]

___(FIN) 306 Financial Pol & Capital Markets (3 cr)[3]

Free Electives 3 cr

___( )______________________________(3 cr)

Total Graduation Requirements 120 cr

*Major requirement fulfills General Education credit(s)

****

GPA Needed to Declare: 2.0

NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended Sequence of Courses:

Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:

Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken ([1] = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

REAL ESTATE-B.S.B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 124 Pre-Calculus
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 181 Applied Calculus I

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(ECN) 101 Principles of Macroeconomics
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles fo Sociology

III. General Education Electives 12 cr

Required by major:
___(ECN) 102 Principles of Microeconomics
___(ECN) 260 Intermediate Microeconomic Theory
___( )______________________________
___( )______________________________

Library Certification Requirement

Introduction to Information Retrieval must be completed before enrolling in any 300/400 level courses.

Accounting Requirements 6 cr

___(ACC) 200 Fundamentals of Financial Accounting (3 cr)
___(ACC) 201 Managerial Accounting (3 cr)

Business Info System/General Business Requirement 9 cr

___(BIS) 142 Intro to Business Computer Systems (3 cr)
___(BSN) 261 Business Law I (3 cr)
___(BSN) 262 Real Estate Law (3 cr)

Economic Requirements 9 cr

___(ECN) 101 Principles of Macroeconomics (3 cr)^{2} *
___(ECN) 102 Principles of Microeconomics (3 cr)^{1} *
___(ECN) 260 Intermediate Microeconomics Theory (3 cr) *

Math Requirement 6 cr

___(MAT) 124 Pre-Calculus (3 cr)^{1} *
___(MAT) 181 Applied Calculus (3 cr)^{1} *

Psychology and Sociology Requirement 6 cr

___(PSY) 101 General Psychology (3 cr)^{1} *
___(SOC) 101 Principles of Sociology (3 cr)^{1} *

Marketing Requirement 3 cr

___(MKT) 341 Principles of Marketing (3 cr)^{3}

Management Requirements 9 cr

___(MGT) 334 Organizational Behavior (3 cr)^{3}
___(MGT) 396 Business Policy (3 cr)^{4}
___(MGT) 447 Business & Society (3 cr)^{4}

Management Science Requirements 9 cr

___(MGS) 210 Introduction to Management Science (3 cr)
___(MGS) 220 Introd. Stat/Business & Economics (3 cr)
___(MGS) 330 Operations Management (3 cr)^{3}

Finance/Real Estate Requirements 21 cr

___(FIN) 305 Financial Planning & Analysis (3 cr)^{3}
___(FIN) 306 Financial Pol & Capital Markets (3 cr)^{3}
___(FIN) 314 Financial Institutions (3 cr)
___(FIN) 340 Principles of Real Estate (3 cr)
___(FIN) 405 Real Estate Appr. & Inv. Analysis (3 cr)

2 Real Estate Electives-see electives sheet
___( )______________________________(3 cr)
___( )______________________________(3 cr)

Free Electives 3 cr

___( )______________________________(3 cr)

Total Graduation Requirements 120 cr

***Major requirement fulfills General Education credit(s)**

****

GPA Needed to Declare: 2.0

NOTE: A grade of "C" or better in Pre-Calculus is required. Also, All CORE courses MUST be completed with a "C" average or better before students can transfer into a business major and before students can take any 300 level classes.

Recommended	***Sequence of Courses:***
Semester I	MAT 124 Pre-Calculus General Psychology or Principles of Sociology
Semester II	MAT 181 Applied Calculus General Psychology or Principles of Sociology BIS 142 Intro to Business Computer Systems ECN 102 Principles of Microeconomics
Semester III	MGS 210 Intro. to Management Science ACC 200 Fund. of Financial Accounting BSN 261 Business Law (or Psych or Sociology if not taken before) ECN 101 Principles of Macroeconomics
Semester IV	ACC 201 Managerial Accounting MGS 220 Intro to Statistics for Bus. & Economics ECN 260 Intermediate Microeconomics If not already taken: Business Law, Psych or Sociology

General Advice:

Microeconomics should be taken before Macroeconomics. Intro. to Business Computer Systems is a prerequisite for Intro. to Management Science

Superscript numbers indicate year course should be taken (^{1} = Freshman year) See Business Prerequisite Flow Chart for Prerequisites and Requirements for Enrollment in 300/400 Level Courses.

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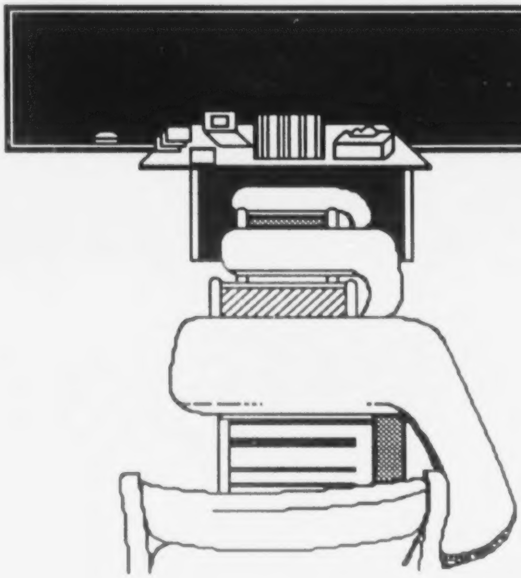

College of Education
and
Human Services

The College of Education & Human Services

B.S.

Criminal Justice
- Corrections
- Juvenile Justice
- Law Enforcement

B.A.

Social Work

B.S.Ed.

Teacher Education (Elementary Education)

Minor

- Art
- Coaching
- Criminal Justice
- Early Childhood
- Economics
- English
- Geography/Earth Science
- Government
- History
- Modern Foreign Language
  - German, French, Spanish
- Philosophy
- Psychology
- Public Administration
- Reading
- Speech

Concentrations

- Biology
- Chemistry
- Environmental Ed
- Mathematics
- Multicultural Ed
- Multicultural TESOL
- Music
- Sociology

Dear Undeclared Major:

The Department of Criminal Justice welcomes you to our academic program in Criminal Justice. We are pleased that you have looked us over and have now decided to declare or change to our major. We certainly hope you will be able to accomplish your career preparation goals by working closely with your advisor and the departmental faculty. We believe we have something to offer are are anxious to work with you.

You should have already consulted the undergraduate catalog for offical explanations of the program requirements. It is also beneficial to you to have spoken with someone in the department, preferably the chairperson, for a more complete overview of the requirements, career fields, placement history, and unique characteristics of the course of study. Our concern is that you have as much information as possible to make a sound judgement about what you want to do.

Hopefully you have already begun to take some of our courses. Your chances of scheduling and completing the program requirements in the four year matriculation time frame depends a lot upon your status at the time of declaring or changing your major. If you transfer or declare after earning junior status (60 credits or above), your task of completing the CRJ credentials requirements will be more difficult. It might mean that you will have to take some summer school classes to catch up or stay on schedule. Law enforcement majors who require three prerequisite courses for the CRJ 322 (Criminalistics) course could have some specific problems. You should consult with your academic advisor as soon as possible to begin to outline strategies for completing the degree program in the regular time frame. Specific questions and concerns about double majors, minors and internship programs should also be presented at these consultations.

Criminal Justice is a client-oriented major and discipline. We do not emphasize the inanimate. Most of our career field is people driven. Hence, our emphasis is on credentialing students who possess outstanding skills in critical thinking and emphasis, problems-solving, communications and computation. These skills will be concomitants of an extensive body of knowledge strengthened by a capacity to deal with concepts and practical situations. The curriculum is designed to prepare the knowledge base necessary to complete in the real work of criminal justice and many allied or related areas. We have developed and committed ourselves to an academic program where writing, communications, concept development and understanding, critical thinking, comprehensive analysis, and interpersonal skills can and will be obtained.

To facilitate the above ends, we insist upon an academic attitude that is consistent with learning and personal growth and challenge students to strive for excellence in the classroom. Students must become agressive consumers of the literature. We insist that you regularly use the tremendous resources of the library. We also place much emphasis on the ethical and fairness concepts.

While values, traditions, and personal beliefs are influential and essential to the study of criminal justice, we also place tremendous weight upon knowledge of the facts. Criminal justice doctrine must also stress doing the right thing as well as doing things right.

We also subscribe to the University's position on General Education, believing that a carefully orchestrated major curriculum is strengthened by the depth and content of general education. Through strategic advising, we are able to maximize the worth and contribution of a general education program. You will find that we also keep up to date on the changes in this program area.

We hope we have communicated to you our best judgment and feelings about our degree program. Surely there are some things that cannot be covered in a two page memorandum. However, you have been or will be assigned an academic and career advisor. This person is knowledgeable, devoted and available to serve you. Begin to plan for success. You need to maximize your returns on this decision to major in criminal justice. We extend our best wishes and our concern that you are successful.

Source: Shepherd, R., Chairperson, Criminal Justice Department. Shippensburg University, Shippensburg, Pennsylvania, September, 1989.

CRIMINAL JUSTICE / CORRECTIONS-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency** Recommended
(MAT) 102 Introduction to Statistics or
(MAT 170) Elem. Stats. for Social Science
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )________________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )________________________________
___( )________________________________
___( )________________________________

C: Biological & Physical Sciences (9 cr)
___( )________________________________
___( )________________________________
___( )________________________________

D: Political, Economic & Geographic Science (6 cr)
___(GOV) 104 Am Gov. Constit. & Polit Found. OR
GOV 105 Am Gov. Instit & Public Pol
___( )________________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Criminal Justice Core Courses 15 cr

___(CRJ) 100 Introduction to Criminal Justice (3 cr)
___(CRJ) 211 Criminal Law and Procedures (3 cr)
___(CRJ) 221 Policing a Democracy (3 cr)
___(CRJ) 231 Court Organization & Operation (3 cr)
___(CRJ) 241 Survey of Corrections

Corrections Concentration 15 cr

___(CRJ) 341 Community-Based Corrections (3 cr)
___(CRJ) 343 Correctional Institutions (3 cr)
___(CRJ) 441 Seminar in Corrections: Trends & Issues (3 cr)
___(SKW) 150 Human Relations Lab (3 cr)
___(SWK) 353 Special Fields in Social Work

Criminal Justice Electives 12 cr

Choose 4:
___(CRJ) 202 Fundamentals of Security (3 cr)
___(CRJ) 471 Internship in Criminal Justice I (3 cr)
___(CRJ) 472 Internship in Criminal Justice II (3 cr)
___(CRJ) 473 Internship in Criminal Justice III (3 cr)
___(CRJ) 474 Internship in Criminal Justice IV (3 cr)
___(CRJ) 481 Independent Study in Criminal Justice (1-3 cr)
___(CRJ) 491 Selected Topics in Criminal Justice (3 cr)

In special circumstances, core courses from the other concentrations may be taken to satisfy the Criminal Justice Electives. See Department Chairperson for details.

Psychology Requirements 9 cr

___(PSY) 101 General Psychology (3 cr) *
AND
Choose 2:
___(PSY) 240 Psychology of Personality (3 cr)
___(PSY) 270 Social Psychology (3 cr)
___(PSY) 220 Psychology of Adjustment (3 cr)
___(PSY) 330 Abnormal Psychology (3 cr)

Sociology Requirement 9 cr

___(SOC) 101 Principles of Sociology (3 cr) *
AND
Choose 2:
___(SOC) 241 Contemporary Social Problems (3 cr)
___(SOC) 243 Minority Groups (3 cr)
___(SOC) 244 Criminology (3 cr)
___(SOC) 245 Juvenile Delinquency (3 cr)

Government Requirement 9 cr

___(GOV) 104 Am Gov: Constitutional/Pol Found (3 cr) *
OR
(GOV) 105 Am Gov: Institu. & Public Policy (3 cr) *
AND
Choose 2:
___(GOV) 203 State and Local Government (3 cr)
___(GOV) 212 Criminal Justice (3 cr)
___(GOV) 213 Public Administration (3 cr)
___(GOV) 306 Constitutional Law II (3 cr)

***Major requirement fulfills General Education Credit(s)**

** Students who test at the advanced level on the placement test will have 12 credits under the Required Skills and Competencies--the remaining three (3) credits move to the General Education Electives (12 to 15 credits).

Total Graduation Requirements 120 cr

* * *

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I or II	CRJ 100 Introduction to Criminal Justice

No other Criminal Justice core courses should be taken until the sophomore year.

Year two:	CRJ 211 Criminal Law & Procedures CRJ 221 Policing a Democracy CRJ 231 Court Organization & Operation CRJ 241 Survey of Corrections

All core courses must be completed in the second year to qualify for "Junior Status" and "Upper Division" standing.

CRIMINAL JUSTICE / JUVENILE JUSTICE-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency** Recommended
(MAT) 102 Introduction to Statistics or
(MAT 170) Elem. Stats. for Social Science
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )___________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

C: Biological & Physical Sciences (9 cr)
___( )___________________________
___( )___________________________
___( )___________________________

D: Political, Economic & Geographic Science (6 cr)
___(GOV) 104 Am Gov. Constit. & Polit Found. OR
GOV 105 Am Gov. Instit & Public Pol
___( )___________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Criminal Justice Core Courses 15 cr

___(CRJ) 100 Introduction to Criminal Justice (3 cr)
___(CRJ) 211 Criminal Law and Procedures (3 cr)
___(CRJ) 221 Policing a Democracy (3 cr)
___(CRJ) 231 Court Organization & Operation (3 cr)
___(CRJ) 241 Survey of Corrections

Juvenile Justice Concentration 15 cr

___(SWK) 150 Human Relations Lab (3 cr)
___(CRJ) 351 Juvenile Justice Process (3 cr)
___(CRJ) 353 Juvenile Caseload Management (3 cr)
___(PSY) 351 Adolescent Psychology (3 cr)
___(CRJ) 451 Seminar in Juvenile Jutice: Trends & Issues (3 cr)

Criminal Justice Electives 12 cr

Choose 4:
___(CRJ) 202 Fundamentals of Security (3 cr)
___(CRJ) 471 Internship in Criminal Justice I (3 cr)
___(CRJ) 472 Internship in Criminal Justice II (3 cr)
___(CRJ) 473 Internship in Criminal Justice III (3 cr)
___(CRJ) 474 Internship in Criminal Justice IV (3 cr)
___(CRJ) 481 Independent Study in Criminal Justice (1-3 cr)
___(CRJ) 491 Selected Topics in Criminal Justice (3 cr)

In special circumstances, core courses from the other concentrations may be taken to satisfy the Criminal Justice Electives. See Department Chairperson for details.

Psychology Requirements 9 cr

___(PSY) 101 General Psychology (3 cr) *
AND
Choose 2:
___(PSY) 240 Psychology of Personality (3 cr)
___(PSY) 270 Social Psychology (3 cr)
___(PSY) 220 Psychology of Adjustment (3 cr)
___(PSY) 330 Abnormal Psychology (3 cr)

Sociology Requirement 9 cr

___(SOC) 101 Principles of Sociology (3 cr) *
AND
Choose 2:
___(SOC) 241 Contemporary Social Problems (3 cr)
___(SOC) 243 Minority Groups (3 cr)
___(SOC) 244 Criminology (3 cr)
___(SOC) 245 Juvenile Delinquency (3 cr)

Government Requirement 9 cr

___(GOV) 104 Am Gov: Constitutional/Pol Found (3 cr) *
OR
(GOV) 105 Am Gov: Institu. & Public Policy (3 cr) *
AND
Choose 2:
___(GOV) 203 State and Local Government (3 cr)
___(GOV) 212 Criminal Justice (3 cr)
___(GOV) 213 Public Administration (3 cr)
___(GOV) 306 Constitutional Law II (3 cr)

***Major requirement fulfills General Education Credit(s)**

** Students who test at the advanced level on the placement test will have 12 credits under the Required Skills and Competencies--the remaining three (3) credits move to the General Education Electives (12 to 15 credits).

Total Graduation Requirements 120 cr

****

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I or II CRJ 100 Introduction to Criminal Justice

No other Criminal Justice core courses should be taken until the sophomore year.

Year two:
CRJ 211 Criminal Law & Procedures
CRJ 221 Policing a Democracy
CRJ 231 Court Organization & Operation
CRJ 241 Survey of Corrections

All core courses must be completed in the second year to qualify for "Junior Status" and "Upper Division" standing.

CRIMINAL JUSTICE / LAW ENFORCEMENT-B.S.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency** Recommended
(MAT) 102 Introduction to Statistics or
(MAT 170) Elem. Stats. for Social Science
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___(BIO) 100 Basic Biology
___(CHM) 105 Chemistry: An Observational Approach
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(GOV) 104 Am Gov. Constit. & Polit Found. OR
GOV 105 Am Gov. Instit & Public Pol
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

III. General Education Electives 12 cr

Criminal Justice Core Courses 15 cr

___(CRJ) 100 Introduction to Criminal Justice (3 cr)
___(CRJ) 211 Criminal Law and Procedures (3 cr)
___(CRJ) 221 Policing a Democracy (3 cr)
___(CRJ) 231 Court Organization & Operation (3 cr)
___(CRJ) 241 Survey of Corrections

Law Enforcement Concentration 15 cr

___(CRJ) 311 Criminal Evidence (3 cr)
___(CRJ) 321 Criminal Investigations (3 cr)
___(CRJ) 323 Police Organization & Operations (3 cr)
___(CRJ) 322 Criminalistics (3 cr)
___(CRJ) 421 Seminar in Law Enforcement: Trends & Issues (3 cr)

Criminal Justice Electives 12 cr

Choose 4:
___(CRJ) 202 Fundamentals of Security (3 cr)
___(CRJ) 471 Internship in Criminal Justice I (3 cr)
___(CRJ) 472 Internship in Criminal Justice II (3 cr)
___(CRJ) 473 Internship in Criminal Justice III (3 cr)
___(CRJ) 474 Internship in Criminal Justice IV (3 cr)
___(CRJ) 481 Independent Study in Criminal Justice (1-3 cr)
___(CRJ) 491 Selected Topics in Criminal Justice (3 cr)

In special circumstances, core courses from the other concentrations may be taken to satisfy the Criminal Justice Electives. See Department Chairperson for details.

Psychology Requirements 9 cr

___(PSY) 101 General Psychology (3 cr) *
AND
Choose 2:
___(PSY) 240 Psychology of Personality (3 cr)
___(PSY) 270 Social Psychology (3 cr)
___(PSY) 220 Psychology of Adjustment (3 cr)
___(PSY) 330 Abnormal Psychology (3 cr)

Sociology Requirement 9 cr

___(SOC) 101 Principles of Sociology (3 cr) *
AND
Choose 2:
___(SOC) 241 Contemporary Social Problems (3 cr)
___(SOC) 243 Minority Groups (3 cr)
___(SOC) 244 Criminology (3 cr)
___(SOC) 245 Juvenile Delinquency (3 cr)

Government Requirement 9 cr

___(GOV) 104 Am Gov: Constitutional/Pol Found (3 cr) *
OR
(GOV) 105 Am Gov: Institu. & Public Policy (3 cr) *
AND
Choose 2:
___(GOV) 203 State and Local Government (3 cr)
___(GOV) 212 Criminal Justice (3 cr)
___(GOV) 213 Public Administration (3 cr)
___(GOV) 306 Constitutional Law II (3 cr)

Biology Requirement 3 cr

___(BIO) 100 Basic Biology (3 cr) *

Chemistry Requirement 3 cr

___(CHM) 105 Chem: An Observational Approach (3 cr) *

***Major requirement fulfills General Education Credit(s)**

** Students who test at the advanced level on the placement test will have 12 credits under the Required Skills and Competencies–the remaining three (3) credits move to the General Education Electives (12 to 15 credits).

Total Graduation Requirements 120 cr

◆◆◆

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I or II CRJ 100 Introduction to Criminal Justice

No other Criminal Justice core courses should be taken until the sophomore year.

Year two:
CRJ 211 Criminal Law & Procedures
CRJ 221 Policing a Democracy
CRJ 231 Court Organization & Operation
CRJ 241 Survey of Corrections

All core courses must be completed in the second year to qualify for "Junior Status" and "Upper Division" standing.

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SOCIAL WORK-B.A.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 170 Elem Stats for Social Science
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
___( )______________________________

B: Literary, Artistic & Cultural Traditions (9 cr)
___( )______________________________
___( )______________________________
___( )______________________________

C: Biological & Physical Sciences (9 cr)
___(BIO) 150 Human Biology
___( )______________________________
___( )______________________________

D: Political, Economic & Geographic Science (6 cr)
___(GOV) 105 Am. Govt: Instit. & Public Policy
___( )______________________________

E: Social & Behavioral Science (6 cr)
___(SOC) 101 Principles of Sociology
___(PSY) 101 General Psychology

III. General Education Electives 12 cr

Social Work Requirements

CORE COURSES 45 cr

___(SWK) 102 Social Work in Social Welfare (3 cr)$^{1/1}$
___(SWK) 150 Human Relations Lab (3 cr)$^{1/2}$
___(SWK) 250 Assessing Indiv., Families, & Small Groups in Society (3 cr)$^{2/1}$
___(SWK) 260 Groups Skills for Social Workers$^{2/1}$
___(SWK) 270 Social Work Practice with Individuals (3 cr)$^{2/2}$
___(SWK) 327 Social Work Practice with Families$^{3/1}$
___(SWK) 340 Assessing Org. & Communities (3 cr)$^{2/2}$
___(SWK) 360 Research Techniques/Social Workers (3 cr)$^{3/2}$
___(SWK) 370 Social Work Practice with Organizations & Communities (3 cr)$^{3/1}$
___(SWK) 450 Social Welfare Policies & Service (3 cr)$^{4/1}$
___(SWK) 391 Seminar in Social Work Methods$^{4/2}$
___(SWK) 389/390/392/393 Field Work in Social Work (12 cr)$^{4/2}$

Sociology Requirement 3 cr
___(SOC) 101 Principles of Sociology (3 cr)

Psychology Requirement 3 cr
___(PSY) 101 General Psychology (3 cr)

Math Requirement 4 cr
___(MAT) 170 Elem. Stat. for Social Science (4 cr)

Government Requirement 3 cr
___(GOV) 105 Amer. Government: Instit. & Public Policy (3 cr)

Biology Requirement 3 cr
___(BIO) 150 Human Biology (3 cr)

Special Population Requirement 6 cr
Select one:
___(SOC) 351 Race Relations (3 cr) $^{3/1}$
AND/OR
___(SOC) 243 Minority Groups (3 r)
OR
The second course should be chosen in consultation with advisor.
___( )______________________________(3cr) $^{3/2}$

Social Work Elective 3 cr
___(SWK)______________________________(3cr) $^{4/1}$

Free Electives 9 cr

*Major requirement fulfills General Education credit(s)

Total Graduation Requirements 120 cr

* * *

GPA Needed to Declare: 2.0

Recommended Sequence of Courses:

Semester I	SWK 102 Social Work in Social Welfare BIO 150 Human Biology PSY 101 General Psychology or SOC 101 Principles of Sociology ENG 101 English Comp or SPE 100 BOC
Semester II	SWK 150 Human Relations Lab PSY 101 General Psychology or SOC 101 Principles of Sociology ENG 101 English Comp or SPE 100 BOC Category "B" Gen Ed course
Semester III	SWK 250 Assess. Ind. Families & Small Groups SWK 260 Group Skills for Social Workers GOV 105 Am. Govt: Instit. & Publis Policy
Semester IV	SWK 340 Assess. Org. & Communities SWK 270 SW Practice with Individuals MAT 170 Elem Stats for Social Science
Semester V	SWK 327 SW Practice with Families SWK 370 SW Practice with Org. & Comm. Special Population Course
Semester VI	SWK 360 Research Techniques in SW Special Populations Course
Semester VI	SWK 450 SW Policies & Services SW Elective
Semester VIII	Field Work in SW SWK 391 Seminar in SW Methods

All Gen Eds should be completed before Semester VIII.

Superscript numbers indicate year and semester course should be taken ($^{3/1}$ = Junior year/second semester etc.)

ADVISING STUDENTS WHO ARE INTERESTED IN THE TEACHING PROFESSION

Many individuals have found that they enjoy working with children or young adults through babysitting, summer camps, athletic, etc. and then decide that they would like to teach these age groups. This enjoyment and appreciation of youth is a basic necessity for a teacher but as one educator said, "You can't teach what you don't know." Therefore, the teacher education program for elementary education majors is a blend of practical experiences with children grounded in a solid academic background in the general education program and in the major. If you, as an undeclared student, are considering an elementary education major, it must be a sound decision based on the understanding that you will be teaching children and young adults to take their places in society in the 21st century. You will need to be a literate individual, knowledgeable in the math, sciences, social sciences, and humanities; you will need critical and creative thinking skills, problem solving skills and have an appreciation of multicultural and international perspectives in order to fulfill your responsibility to the children you teach.

The elementary education curriculum at Shippensburg is a four-year program leading to the degree of Bachelor of Science in Education. Successful completion of this course of study qualifies the graduate for a variety of professional employment possibilities. The basic program leads to an elementary teacher certificate, thus qualifying the graduate for employment in any level kindergarten through sixth grade (K-6) as well as grades 7 and 8 if they are part of a state approved Middle School. All are qualified to teach Developmental Reading at any grade level K-12. Those students choosing the Early Childhood minor receive additional certification for Nursery School (N-3). A certificate to teach environmental education courses (K-12) is given to those students completing the environmental education sequence.

The curriculum for the elementary education major can be divided into two parts- first, the University's General Education requirements and secondly, the elementary education certification course requirements and a minor or concentration. Another of the specific requirements is the completion of 60 hours of field experiences prior to the Professional Semester block and Student Teaching. The field experience requirements would include observation/participation activities with children. In addition to completing the 60-hour requirement for admittance to Professional Semester, students must successfully complete the Pre-Professional Skills Test with a minimum score of 169 on each part and specified course work with grades of "C" or higher, including minor or concentration courses. They must also have a 2.5 grade point average before admission into Professional Semester, which itself is a prerequisite for Student Teaching.

Students need to demonstrate initiative, patience, and empathy for children in their work with children as they learn to plan and guide the child's program; observe the child's application of skills and knowledge; and see hor growth in one area of a child's life is reflected in growth in other areas. Their program emphasizes knowing how and when to help the child learn using diagnostic-prescriptive models. By study, direct observation, and participation, students grow in understanding various methods of teaching and become skillful in the use of curriculum materials and specialized equipment. They critically examine various courses of study and the newer techniques of measuring and judging children's social and academic growth.

Source: Urbanowicz, M.J. Professor of Teacher Education. Shippensburg University, Shippensburg, Pennsylvania, June, 1991.

Admission to Elementary Education

Students will be considered for admission into the department during the annual open periods: the first full week of October and the first full week of February. Because of the University limits on enrollment, students seeking admission will be ranked according to their score on the approved rating form. In view of the limited enrollment, only the top ranked individuals will be admitted. If a student is not admitted on their first attempt and they wish to reapply, they must submit a new application for the subsequent enrollment period.

All students wishing to change their major to elementary education must submit a typed letter of request to the department chairperson. This letter will be first step in your application procedure. It will be reviewed by two faculty members. The letter should include a written expression of your philosophy of education and why you wish to become an elementary education major. Your letter should communicate your ideas clearly and demonstrate appropriate usage of standard English. Every effort should be taken to avoid spelling errors, punctuation and grammatical errors, colloquialisms, and sexist language. Following the initial reading of your letter, the department will inform you of a date for the required writing sample. This sample will be scored and used as part of your ranking for admission into the program. Other factors used in the screening process will include the following: weighted GPA, SAT, interview with the departmental chairperson and grades in American School, Child Development, and Basic Oral Communication.

Sample Rating Form

	weak				strong	
Education Philosophy	1	2	3	4	5	
SAT Scores	1	2	3	4	5	
GPA(Weighted by 4 times its value)						
Interview	1	2	3	4	5	
Writing Sample	1	2	3	4	5	
				Sum-Total		
Grades:	F	D	C	B	A	
TCH 205 American School	0	1	2	3	4	
TCH 160 or PSY 260	0	1	2	3	4	
SPE 101 Basic Oral Com	0	1	2	3	4	
			Total Score			

TEACHER EDUCATION (Elementary Education)-B.S.Ed.

General Education Requirements

I. Required Skills and Competencies 15 cr

___(ENG) 101 English Composition OR
(ENG) 110 Advanced Placement English (3 cr)
Student may need to take (ENG) 100 Basic Writing first, based on test results.
___(SPE) 100 Basic Oral Communication (3 cr)
___Mathematical Competency-Required
(MAT) 110 Fundamentals of Mathematics I (3 cr)
___(HIS) 105 World History I (3 cr) AND
___(HIS) 106 World History II (3 cr)

II. Categories of Knowledge 33 cr

A: Language/Numbers for Rational Thinking (3 cr)
____(MAT) 102 Introduction to Statistics

B: Literary, Artistic & Cultural Traditions (9 cr)
___( ) Literature from Gen Ed. program
___(ART) 274 Arts and Crafts
___(MUS) 110 Fundamentals of Music

C: Biological & Physical Sciences (9 cr) **
___(PHY) 115 Physical Sci-A Lab Approach
___(BIO) 105 Biology-A Lab Approach
___(ESS) 110 Introduction to Geology
OR
(ESS) 111 Introduction to Atmosphere
OR
(BIO) 145 Problems of the Environment

D: Political, Economic & Geographic Science (9 cr) **
___(GEO) 101 World Geography
___(GOV) 104 Am Govt: Const. & Pol Found.
OR
(GOV) 105 Am Govt: Inst. & Pub. Pol.
___(ECN) 101 Principles of Macroeconomics
OR
(ECN) 102 Principles of Microeconomics

E: Social & Behavioral Science (6 cr)
___(PSY) 101 General Psychology
___(SOC) 101 Principles of Sociology

**III. General Education Electives ** ** 18 cr

___(MAT) 111 Fundamentals of Mathematics II (3 cr)
___(PSY) 260 Child Growth & Development
OR
(TCH) 160 Implica. of Child Growth/Dev. (3 cr)
___(PSY) 310 Educational Psychology (3 cr)
___(PSY) 355 Psychology of Exceptional Child
OR
(EEC) 411 Introduction to Exceptionality (3 cr)
___(HPE) 290 Health Ed. in the Elem School (3 cr)
___( ) Elective (3 cr)

Professional Credits 44 cr

___(TCH) 205 American School (3 cr)
___(TCH) 250 Elements of Instruction (3 cr)
___(TCH) 231 Reading Instruction (3 cr)
Recommended Electives (Choose one)
___(MUS) XXX New Professional Music Course (3 cr)
___(HPE) 291 Dev Phys Per Mot Act (3 cr)
___(TCH) 420 Microcomputers in the Classroom (3 cr)

Professional Semester (17 hrs)

___(TCH) 321 Language & Reading in Elem School (3 cr)
___(TCH) 341 Mathematics in the Elem School (3 cr)
___(TCH) 345 Integrating Diagnostic Strategies (3 cr)
___(TCH) 346 Science in Elementary School (3 cr)
___(TCH) 347 Social Studies in Elem School (3 cr)
___(LSC) 201 Books and Materials for Children (2 cr)
___(EDU) 390 Student Teaching (12 cr)
___(EDU) 395 Professional Practicum (3 cr)

Minor or Concentration (15 to 21 cr)

Number of credits depends upon minor or concentration
Refer to Required Courses following this course outline.

MINOR
Art
Coaching
Criminal Justice
Early Childhood
Economics
English
Geography/Earth Sci.
Government
History
Modern Foreign Languages
French, German, Spanish
Philosophy
Psychology
Public Administration
Reading
Speech

CONCENTRATIONS
Biology
Chemistry
Environmental Ed
Mathematics
Multicultural Education
Multicultural/TESOL
Music
Sociology

***Major requirement fulfills General Education Credit(s)**

**Program requirements differ from standard General Education Requirements

Total Graduation Requirements a minimum of 128 cr

* * *

GPA Needed to Declare: 2.5

Students are considered for admission to Elementary Eduation during two annual open periods (the first full weeks in October and February). Students are ranked by several factors including educational philosophy, SAT scores, current GPA, interview, a writing sample, and grades in certain classes. A letter requesting admission to the department is the first step in the application procedure. See "Admission to Elementary Education" for details.

Recommended Sequence of Courses:

Year 1 PSY 101 General Psychology
GEO 101 World Geography
SOC 101 Principles of Sociology
BIO 105 Biology: A Lab Approach
TCH 205 American School
Category "B" Literature
(Intro to Drama, Fiction or Poetry)
MAT 110 Fundamentals of Math I and MAT 170 Introductory Statistics can be taken if the student has tested at the college level on the Placement Test.

Child Growth & Development or Implications of Child Growth should only be taken after General Psychology.

Educational Psychology can be taken in the sophomore year after General Psychology has been taken.

MINORS FOR ELEMENTARY EDUCATION MAJORS

The indivdual departments have program sheets which detail the minors within their respective disciplines. Please discuss your choice with the appropriate individuals within the discipline area. Remember that minors which require more than 18 semester hours may cause the total number of credits required for graduation to exceed the indicated 128 semester hours.

ART

Required Courses:	
ART 101 Art Appreciation	3 s.h.
ART 110 Basic Drawing	3 s.h.
ART 215 Color & Two-Dimensional Design	3 s.h.
ART 274 Arts and Crafts	3 s.h.
ART 318 Three-Dimensional Design	3 s.h.
ART History Elective	3 s.h.
TOTAL	18 s.h.

COACHING

Required Courses:	
HPE 240 First Aid, Prevention, Care of Athletic Injuries	3 s.h.
HPE 245 Theories and Practices/Conditioning-Training	3 s.h.
HPE 325 Sport Psychology	3 s.h.
HPE 343 Physiological Basis of Athletics	3 s.h.
HPE 344 Mechanical Analysis of Sport Skills	3 s.h.
Electives (with advisement) from the Science of Coaching and Techniques of Officiating–	6 s.h.
HPE 279 Softball Fast-Pitch/Slow-Pitch	
HPE 280 Baseball	
HPE 281 Basketball	
HPE 282 Football	
HPE 283 Women's Field Hockey	
HPE 284 Women's LaCrosse	
HPE 285 Swimming and Diving	
HPE 286 Tennis	
HPE 287 Soccer	
TOTAL	21 s.h.

CRIMINAL JUSTICE

Required Courses:	
CRJ 100 Introduction to Criminal Justice**	3 s.h.
CRJ 211 Criminal Law and Procedures	3 s.h.
CRJ 221 Policing A Society	3 s.h.
CRJ 231 Court Organization and Operation	3 s.h.
CRJ 241 Survey of Corrections	3 s.h.
Electives (with advisement) from: Criminal Justice Courses above the 200 level	6 s.h.
TOTAL	21 s.h.

**Prerequisite for all required courses

EARLY CHILDHOOD EDUCATION

Required Courses: (NOTE-These courses may be changed during your tenure at SU)	
TCH 160 Implications of Child Development	3 s.h.
TCH 200 School Organizational Patterns	3 s.h.
TCH 240 Curriculum I	3 s.h.
TCH 241 Curriculum II	3 s.h.
TCH 451 Parent-School Relationships	3 s.h.
TCH 450 Assessment and Evaluation	3 s.h.
TOTAL	18 s.h.

ECONOMICS

Required Courses:	
ECN 101 Principles of Macroeconomics	3 s.h.
ECN 102 Principles of Microeconomics	3 s.h.
ECN 260 Intermediate Microeconomics OR ECN 270 Intermediate Macroeconomics	3 s.h.
ECN 310 Public Finance	3 s.h.
ECN 323 Comparative Economic Systems	3 s.h.
Electives (Select 3 s.h. with advisement) from:	3 s.h.
ECN 319 International Economics: Theory	
ECN 321 International Economics: Policy	
TOTAL	18 s.h.

ENGLISH

Literature Emphasis–

Required Courses:	
ENG 151 Introduction to Poetry	3 s.h.
ENG 105 Literary Analysis	3 s.h.
ENG 236 Major British Writers I and ENG 237 Major British Writers II OR ENG 233 Major Am. Writers I and ENG 234 Major American Writers II	6 s.h.
Electives:	
Select 3 s.h. with advisement from Major Authors-	3 s.h.
ENG 227 Shakespeare I	
ENG 228 Shakespeare II	
ENG 241 Jane Austen	
ENG 242 T.S. Elliott	
Select with advisement from Eng. Seminar Courses	3 s.h.
ENG 367 Seminar in Drama	
ENG 368 Seminar in Fiction	
ENG 369 Seminar in Poetry	
TOTAL	18 s.h.

Writing Emphasis–

Required Courses:	
ENG 151 Introduction to Poetry	3 s.h.
ENG 105 Literary Analysis	3 s.h.
ENG 209 Advanced Composition	3 s.h.
Electives (Select 9 s.h.'swith advisement) from:	9 s.h.
ENG 112 Writing the Research Paper	
ENG 214 Reviewing the Arts	
ENG 307 Creative Writing: Poetry	
ENG 308 Creative Writing: Fiction	
ENG 325 Advanced Creative Writing	
TOTAL	18 s.h.

GEOGRAPHY/EARTH SCIENCE

Required 9 s.h.
One Geography/Earth Science course from 100 level
One Geography/Earth Science course from 200-300 level
One Geography/Earth Science course from 400 level

Electives: Select with advisement 12 s.h. of course work from one 12 s.h. of the following areas of concentration:
GeoEnvironmental
Urban-Rural Planning
Cultural or World Regional Systems
Earth Science or GeoScience

TOTAL	21 s.h.

GOVERNMENT
Required Courses:
GOV 104 American Gov: Consitutional and Pol. Foundations OR GOV 105 American Gov: Institutions and Public Policies 3 s.h.
GOV 110 Introduction to Gov. and Politics 3 s.h.

Electives (Select 3 s.h. with advisement) from: 3 s.h.
#GOV 171 Twentieth Century Political Ideologies
GOV 205 Political Theory from Ancient Times-19th Century
GOV 305 Constitutional Law I
GOV 306 Constitutional Law II
GOV 424 American Political Thought
GOV 440 Public Service Ethics
GOV 452 Constitutional Law and the Judicial Process

Elective (Select 3 s.h. with advisement) from: 3 s.h.
GOV 150 Introduction to International Relations
#GOV 202 Comparative Government
GOV 215 Comparative Administration
#GOV 301 International Law and Organization
GOV 312 American Foreign policy
#GOV 465 Government and Politics of Latin America

Elective (Select 3 s.h. with advisement) from: 3 s.h.
GOV 203 State and Local Government
GOV 207 Municipal Government and Administration
GOV 208 Regional and Urban Planning
GOV 413 Pennsylvania Local Government

Elective (Select 3 s.h. with advisement) from: 3 s.h.
GOV 203 American Political Parties and Politics
GOV 209 Public Opinion and Propoganda
GOV 210 Contemporary Issues
GOV 221 Interest Groups in American Society
GOV 225 Federal-State-Local Relations
GOV 308 The Legislative Process
GOV 309 The American Presidency

TOTAL 18 s.h.
#Courses offered on a three year cycle (others on two year cycle)

HISTORY
Required Courses:
HIS 103 Early History of the United States 3 s.h.
HIS 104 Recent History of the United States 3 s.h.
HIS 105 World History I 3 s.h.
HIS 106 World History II 3 s.h.

Elective (Select 3 s.h. with advisement) from: 3 s.h.
Non-Western History courses at the 300 level or above

Elective (Select 3 s.h. with advisement) from: 3 s.h.
European History courses at the 300 level or above

TOTAL 18 s.h.

MODERN LANGUAGES
A minimum of 18 credit hours to a maximum of 24 credit hours (depending on initial placement) in the selected language. The program is divided between four required courses and two electives plus two courses numbered 101 or 102 and 103 for those students who begin their studies in courses with less than a 125 number. The student should make every attempt to choose at least two courses listed among those numbered between 300 and 500.

French*
Required Courses for 18-hour track:
FRN 200 Intro to Reading and Translating French 3 s.h.
FRN 202 Intermediate French Conversation 3 s.h.
FRN 212 French Grammar 3 s.h.
FRN 225 French Civilization 3 s.h.
Electives:
Two additional courses at the 200 or 300 level 6 s.h.

TOTAL 18 s.h.

Required Courses if initial placement is a course numbered below 125:
FRN 101 Beginning French I OR FRN 102 Beginning French II 3 s.h.
FRN 103 Intermediate French 3 s.h.

TOTAL 24 s.h.

German*
Required courses for 18-hour track:
GER 150 German Civilization and Culture 3 s.h.
GER 200 Introduction to Reading and Translating German OR GER 125 German for the Sciences 3 s.h.
GER 203 Intermediate German Conversation 3 s.h.
GER 212 German Grammar 3 s.h.

Electives:
Two additional courses at the 200 or 300 level 6 s.h.

TOTAL 18 s.h.

Required Courses if initial placement is a course numbered below 125:
GER 101 Beginning German I OR GER 102 Beginning German II 3 s.h.
GER 103 Intermediate German 3 s.h.

TOTAL 24 s.h.

Spanish*
Required Courses for 18-hour track:
SPN 150 Spanish Civilization and Culture 3 s.h.
SPN 200 Intro to Reading and Translating Spanish 3 s.h.
SPN 202 Intermediate Spanish Conversation 3 s.h.
SPN 212 Spanish Grammar 3 s.h.

Electives:
Two additional courses at the 200 or 300 level 6 s.h.

TOTAL 18 s.h.

Required Courses if initial placement is a course numbered below 125:
SPN 101 Elementary Spanish Conversational Approach OR SPN 102 Elem Spanish Traditional Approach 3 s.h.
SPN 103 Intermediate Spanish 3 s.h.

TOTAL 24 s.h.
*Total credits required dependent upon initial placement

PHILOSOPHY
Required Courses:
PHL 101 Introduction to Philosophy OR PHL 102 Reflective Thinking 3 s.h.
PHL 205 History of Philosophy 3 s.h.

Electives:
Select (with advisement) from 200 level courses 6 s.h.
Select (with advisement) from 300-400 level courses 6 s.h.

TOTAL 18 s.h.

PSYCHOLOGY
Select (with advisement) from the 100 level courses 3 s.h.
PSY 101 General Psychology
PSY 102 Foundations of Psychology: Personal-Social
PSY 105 Research Design & Stat./Behav. Sci. I

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Select (with advisement) from the 200 level courses, at least one course which is preceded by a (+) 6 s.h.
+PSY 205 Research Design and Statistics II
+PSY 210 Human Development
+PSY 235 Conditioning and Learning
+PSY 240 Psychology of Personality
+PSY 270 Social Psychology
PSY 220 Psychology of Adjustment
PSY 260 Child Growth and Development
PSY 280 Psychology of Human Sexual Development

Select (with advisement) from 300-400 level courses, at least one course which is preceded by a (~) 6 s.h.
~PSY 301 Experimental Psychology
~PSY 320 Physiological Psychology
~PSY 325 Psychology of Human Conditioning
~PSY 330 Abnormal Psychology
~PSY 430 Sensation and Perception
~PSY 485 Tests and Measurement
PSY 310 Educational Psychology
PSY 351 Psychology of Adolescence
PSY 355 Psychology Exceptional Child
PSY 361 Psychology of Group Interaction
PSY 380 Psychology of Assessment
PSY 390 Psychology of Creativity
PSY 425 Transpersonal Psychology
PSY 450 Crisis Intervention
PSY 475 Industrial Organizational Psychology
PSY 484 Psychology of Person to Peron Interaction

Elective (3 s.h. with advisement) from any non-internship offering by the Psychology Department 3 s.h.

TOTAL 18 s.h.

PUBLIC ADMINISTRATION

Required Courses:
GOV 104 American Government: Constitutional and Political Foundations OR GOV 105 American Government: Institutions and Public Policies 3 s.h.
GOV 213 Public Administration 3 s.h.

Electives (Select 3 s.h. with advisement) from: 3 s.h.
GOV 203 State and Local Government
GOV 207 Municipal Government and Administration
GOV 412 Pennsylvania Local Government

Electives (Select 6 s.h. with advisement) from: 6 s.h.
GOV 316 Public Management
GOV 317 Public Personnel Administration
GOV 318 Public Financial Administration

Electives (Select 3 s.h. with advisement) from: 3 s.h.
GOV 208 Regional and Urban Planning
GOV 215 Comparative Administration
GOV 225 Federal-State-Local Relations
GOV 350 Principles of Labor Relations
GOV 355 Legal Frame. for Coll. Barg. in the Publ. Sector
GOV 440 Public Service Ethics

TOTAL 18 s.h.

READING

Required Courses:
TCH 231 Reading Instruction 3 s.h.
RDG 231 Psychology of Reading 3 s.h.
RDG 329 Reading in the Content Areas 3 s.h.
TCH 333 Basic Diag & Remedial Proced. in Reading 3 s.h.

Electives (Select 6 s.h.'swith advisement) from: 6 s.h.
SPE 271 Communication Development in Children
RDG 431 Seminar-Selected Topics in Reading
TCH 222 Teaching Linguistically & Culturally Different Child
TCH 422 Studies in Children's Literature

TOTAL 18 s.h.

SPEECH

At least two of the six courses in the minor must be selected from the 300 or 400 level

Select (with advisement) one or two: 3-6 s.h.
SPE 104 Introduction to Interpersonal Communications
SPE 200 Discussion
SPE 205 Interviewing
SPE 304 Problems in Interpersonal Communication
SPE 351 Public Speaking
SPE 352 Debate

Select (with advisement) one or two: 3-6 s.h.
SPE 101 Fundamentals of the Communication Process
SPE 255 Speech Criticism
SPE 303 Effective Listening
SPE 353 American Public Address
SPE 354 Contemporary Public Address
SPE 402 Oral Communication Theory
SPE 450 Development of Oral Persuasion

Select (with advisement) one of the following or another course 3 s.h. from above
SPE 160 Intergroup/Intercultural Communication
SPE 240 The Dramatic Narrative Film
SPE 380 Seminar in Speech
SPE 393 Selected Topics in Speech
SPE 375 Resolving Conflict through Communication

TOTAL 18 s.h.

CONCENTRATIONS FOR ELEMENTARY EDUCATION MAJORS

A concentration is a departmentally selected group of courses which provide the student with indepth background in an area of study. This series of courses is not recognized by the University or State as a minor. A concentration requires at least 15 semester hours of study in the area which is beyond the study of a major not selecting the concentration. The concentration must include at least 2 upper division courses.

BIOLOGY

Required Courses:

BIO 106 Principles of Biology	4 s.h.
BIO 120 General Botany	3 s.h.
BIO 210 General Zoology	3 s.h.
BIO 260 Genetics	3 s.h.
BIO 300, 301, or 302 Biology Seminar	1 s.h.

Elective (Select 3 s.h. with advisement) from:

BIO 140 Introduction to Ecology	3 s.h.
BIO 240 General Ecology	3 s.h.

Elective (Select with advisement 2 courses from the 300-400 level)	6 s.h.
TOTAL	23 s.h.

CHEMISTRY

Required Courses:

CHM 121 Chemical Bonding	3 s.h.
CHM 122 Chemical Dynamics	3 s.h.
CHM 123 Laboratory IA-Chemical Systems*	2 s.h.
CHM 124 Lab IIA-Exp. Quantitative Analysis	3 s.h.
CHM 221 Modern Organic Chemistry I	3 s.h.
CHM 223 Lab IIIA-Exp. Organic Techniques#	2 s.h.
TOTAL	16 s.h.

*CHM 125 may be substituted for CHM 123 with the consent of the Chemistry Department.

#CHM 225 may be substituted for CHM 223 with the consent of the Chemistry Department.

ENVIRONMENTAL EDUCATION

Required Courses:

BIO 145 Problems of the Environment	3 s.h.
EDU 410 Environmental Education Practicum	3 s.h.

Select at least one course from- 3 s.h.
BIO 240 General Ecology
BIO 140 Introduction to Ecology

Select at least one course from - 3 s.h.
BIO 148 Field Natural History
BIO 208 Field Biology
BIO 210 Field Zoology
BIO 448 Diversity of Vascular Plants

Select at least one course from: 3 s.h.
ESS 110 Man's Geological Environment 3 s.h.
ESS 111 Man's Atmospheric Environment 3 s.h.
ESS 210 Physical Geology 3 s.h.
ESS 304 Applied Meteorology/Climatology 3 s.h.

Electives:
Select sufficient courses to complete the 24 credits required for the program:
ANT 111 Cultural Anthropology 3 s.h.
ANT 121 Physical Anthropology 3 s.h.
BIO 220 Microbiology 3 s.h.
BIO 205 Marine Biology 3 s.h.
BIO 245 Marine Ecology 3 s.h.
BIO 310 Mammalogy 3 s.h.
BIO 311 Ornithology 3 s.h.
BIO 312 Ichthyology 3 s.h.
BIO 442 Hydrobiology 3 s.h.
CHM 103 Chemistry: A Cultural Approach 3 s.h.
ECN 310 Public Finance 3 s.h.
ECN 340 Introduction to Regional Economics 3 s.h.
ECN 345 The Economics of Growth and Development 3 s.h.
ESS 442 Environmental Geology 3 s.h.
GEO 440 Field Techniques 3 s.h.
GEO 444 Environmental Land-Use Planning 3 s.h.
GOV 207 Municipal Government and Administration 3 s.h.
GOV 208 Regional and Urban Planning 3 s.h.
GOV 316 Public Management 3 s.h.
HPE 101 Beginning Swimming 1 s.h.
HPE 104 Intermediate-Advanced Swimming 1 s.h.
HPE 200 Health 2 s.h.
HPE 211 Standard First Aid & Personal Safety 2 s.h.
HPE 219 Jogging for Life 2 s.h.
HPE 290 Health Education in the Elementary School 3 s.h.

TOTAL 24 s.h.

**Successful completion of this concentration will make the student eligible for certification in Environmental Education.

MATHEMATICS

Required Courses:

MAT 211 Calculus I	4 s.h.
MAT 225 Discrete Mathematics	3 s.h
MAT 333 Eucidean and Non-Eucidean Geometry	3 s.h.
CPS 180 Microcomputer Basic	3 s.h.
EDU 420 Microcomputers in the Classroom	3 s.h.
TOTAL	16 s.h.

MULTICULTURAL EDUCATION

Required Core 6-9 s.h.
ANT 111 Cultural Anthropology 3 s.h.
SOC 101 Principles of Sociology 3 s.h.
HIS 204 Afro-American History 3 s.h. OR
    HIS 205 United States Minorities 3 s.h. OR
    HIS 207 Women in History 3 s.h.

Professional Education 6 s.h.
TCH 222 Teaching the Linguistically & Culturally Different Child 3 s.h.
SPN 225 An Introduction to Spanish Children's Liturature

Related Electives 3-6 s.h.

TOTAL 18 s.h.

MULTICULTURAL/TESOL

(Teaching English to Speakers of Other Languages)

Multicultural Core 6-9 s.h.
ANT 111 Cultural Anthropology 3 s.h.
ENG 157 Literature of Minorities 3 s.h.
SOC 101 Principles of Sociology 3 s.h.

Choose one of the following: 3 s.h
HIS 204 Afro-American History 3 s.h. OR
    HIS 205 United States Minorities 3 s.h. OR
    HIS 207 Women in History 3 s.h.

Professional Education 6 s.h.
TCH 222 Teaching the Linguistically & Culturally Different Child 3 s.h.
SPN 225 An Introduction to Spanish Children's Literature

Elect one:	3 s.h
EDU 325 Teaching of Foreign Language	
ENG 223 The Grammars of English	
ENG 312 THe Structure of English	
Related Electives	0-3 s.h.
SPN 229 Hispanic Folklore	
SPN 400 OR SPN 490 when a Latin Am. topic is offered	
SOC 243 Minority Groups (prereq SOC 101)	
ANT 111 Cultural Anthropology (prereq ANT 101)	
SPE 160 Intro to Intergroup/Intercultural Communications	
PSY 270 Social Psychology	
MUS 461 Folk Music of the World	
GEO 140 Cultural Geography	
PHL 295 Comparative Religions	
TOTAL	18 s.h.

MUSIC

Required Courses:	
MUS 121 Introduction to Music	3 s.h.
MUS 212 Music Theory	3 s.h.
MUS 222 Music History of the Renaissance and Baroque Periods OR MUS 224 Music History of the Classic and Romantic Eras	3 s.h.
MUS 461 Folk Music of the World	3 s.h.
Elective:	
A course chosen from the Performance category	3 s.h.
A course chosen from the Literature category	3 s.h.
TOTAL	18 s.h.

SOCIOLOGY

Required Courses:	
SOC 101 Principles of Sociology	3 s.h.
SOC 241 Contemporary Social Problems	3 s.h.
SOC 243 Minority Groups	3 s.h.
SOC 254 Social Organization and Social Change	3 s.h.
SOC 450 Social Theory	3 s.h.
Elective (select 3 s.h. with advisement) from Sociology courses at the 200 level or above	3 s.h.
TOTAL	18 s.h.

Appendices

ACADEMIC DEANS

COLLEGE	DEANS	BOX	SECRETARY	TEL#
Arts & Sciences	Dr. Robert Golden	OM 201	Dianna Ferrell	1151
	Dr. Denis Wright Associate Dean	OM201	Connie Reilly	1151
Business	Dr. Ruth Armstrong Interim Dean	SHN 350E	Fran Williamson	1435
	Mr. Anthony Winter, Assistant Dean	SHN 350	Laura Irwin	1620
Education/Human Services	Dr. Robert Bartos	HH 119	Barb Fisher	1373
	Dr. Peggy Hockersmith Assistant Dean/Dir. of Field Service	HH 120	Jean Thomas Donna Ackelsberg	1141 1487
Division of Undeclared Majors	Dr. Elnetta G. Jones	HH 103	Terry Monismith	1395
	Ms. Marian B. Schultz, Assistant Dean	HH 105		1395

ALPHABETICAL LISTING OF UNDERGRADUATE DEPARTMENTS

DEPARTMENT/ DIVISION/PROGRAM	CHAIRPERSON	BOX	SECRETARY	TEL#
Accounting	Mr. Edward Goodhart	SHN 325	Mrs. Sandi Corman	1436
Art	Dr. Betsy Farmer	HAC 210	Mrs. Vonnie Mowery	1530
Biology	Dr. William Rodgers	FSC 144	Ms. Carol Holtry	1401
Business Education/Office Admin.	Dr. Francis Cannon	SNH 223	Ms. Karen Craig	1438
Chemistry	Dr. Daniel Mack	FSC 325	Mrs. Sally Markee	1629
Communications/Journalism	Dr. Pat Waltermyer	STH 205	Mrs. Ellie Gardner	1521
Criminal Justice	Mr. Roosevelt Shepherd	HH 207	Mrs. Cindy Stitt	1558
Economics	Dr. Brendan Finucan	SHN 221	Ms. Karen Craig	1437
English	Dr. Donald Palumbo	SHC 121	Mrs. Carol Besecker	1495
Fin. Admin./Management Sci & Info. Sys	Dr. Herbert Roth	SNH 311	Mrs. Jill Bard	1434
Geography/Earth Science	Dr. John Benhart	SRH 106	Mrs. Chris Ocker	1685/1509
Government	Dr. Hugh Jones	FOB 109	Mrs. Brenda Horst	1718
Health & Physical Ed.	Dr. Sally McGrath	HFH 105	Mrs. Laura Bonanni	1711
History & Philosophy	Mr. Dennis Castelli	DHC 223	Mrs. Shirley Mellinger	1621
Management & Marketing	Dr. Charles Hollon	SNH 225	Mrs. Sue Harvey	1439
Mathematics/Computer Science	Dr. Howard Bell	FSC 215B	Ms. Pam McLaughlin	1431/1433
Modern Languages	Dr. Wiliam Morgan	SNH 131	Mrs. Janet Deck	1635/1671
Music	Dr. Bennie Truax	MA 102A	Mrs Pat Pheil	1638
Physics	Dr. Robert Winter	FSC 121	Mrs. Becky Fulton	1570
Psychology	Dr. Hugh Aberman	GH 201	Mrs. Melissa Fleming	1657
Social Work	Dr. Ann Gero	HH 212	Mrs. Joyce Walters	1717
Sociology/Anthropology	Dr. Walter Konetschni	FOB 115	Mrs. Lisa Dubbs	1735
Speech & Theatre Arts	Dr. James St. Clair	DHC 321	Mrs. Ginny Long	1732
Teacher Education	Dr. John Martin	HH 324	Mrs. Linda Hoke	1688

DIRECTORY OF ACADEMIC ADVISORS
DIVISION OF UNDECLARED MAJORS

ADVISOR	OFFICE	BOX	TEL#	DEPARTMENT
Abdalla, Albert (Dr.)	DHC 025	DHC 121	1505	English
Ackelsberg, Robert (Dr.)	SNH 227A	SNH 225	1702	Management/Marketing
Alexander, Eugene (Dr.)	GH 203	GH 201	1798	Psychology
Anderson, William (Dr.)	HH 301	HH324	1440	Elem. Education
Austin, Thomas (Dr.)	HH 205	HH 207	1770	Criminal Justice
Bartoli, Angela (Dr.)	GH 301	GH 201	1553	Psychology
Behler, Kerry (Mr.)	HH 107	HH 107	1614	Act 101
Bell, Howard (Dr.)	FSC 215A	FSC 215	3099/1431	Math/Computer Science
Benhart, John (Dr.)	SRH 106	SRH 104	1685/1509	Geography/Earth Science
Bluman, Dale (Dr.)	DHC 333	DHC 32 1	1720	Speech/Theatre Arts
Bradshaw, Mary (Mrs.)	Wright	Wright	1481	Act 101/Counseling
Butler, Beverly (Dr.)	Mclean Basemt.	Mclean Basemt.	1420	English/Writing
Cannon, Francis (Dr.)	SNH 223	SNH 223	1438	Business Ed./Off. Admin.
Castelli, Dennis (Dr.)	DHC 225	DHC 223	1621	History
Condon, Juanita (Ms.)	HH 106	HH 106	1329	Act 101
Coolsen, James (Dr.	DHC 221	DHC 223	1727	History
Costanzo, Angelo (Dr.)	DHC 115	DHC 121	1496	English
Crowe, Virginia (Dr.)	LL	LL	1463	Director, Library
Dibello, Catherine (Dr.)	DHC 103	DHC 121	1193	English
Dracha, Richard (Mr.)	HH 224	HH 212	1633	Social Work
Faber, Kristine (Dr.)	DHC 103	DHC 121	1195	English
Glanville, Maree (Mrs.)	OM 306A	OM 306A	1154	Institutional Research
Gleason, Harold (Dr.)	DHC 119	DHC 121	1494	English
Gunter, Alfred (Dr.)	FSC 235	FSC 142	1490	Biology
Harper, Robert (Dr.)	SRH 110	SRH 104	1662	Geography
Hockersmith, Peggy (Dr.)	HH 314	HH 324	1653	Elementary Ed.
Hynes, William (Mr.)	HAC 120	HAC 210	1531	Art
Jefferson, Diane (Ms.)	GH 200	GH 200	1616	Director/Minority Stu. Aff.
Jones, Elnetta (Dr.)	HH 101	HH 103	1395	Dean/Spec. Academic Prog.
Konetschni, Wlater (Dr.)	FOB 113	FOB 115	1247	Sociology
Laite, Berkley (Mr.)	LL	LL	1473	Library
Lang, Eveline (Dr.)	DHC 317	DHC 321	1733	Speech/Theatre Arts
Libertin, Mary (Dr.)	DHC 017	DHC 121	1566	English
Lindberg, John (Dr.)	DHC 125	DHC 121	1215	English
Lineweaver, Hilda (Dr.)	FOB 110	FOB 115	1706	Sociology
Lovett, David (Mr.)	Wright	Wright	1481	Act 101/Counseling
Mack, Daniel (Dr.)	FSC 315	FSC 327	1572	Chemistry
Martin John (Dr.)	HH 324	HH 324	1781	Elementary Ed.
McGrath Sally (Dr.)	HG 101B	HG 101B	1721	Health/Phys. Ed.
McLeod, Richard (Dr.)	DHC 235	DHC 223	1192	History
Morgan, Betty Lu (Dr.)	OM 210C	OM 210C	1535	Assoc. Dean of Students
Moriarty, Thomas (Mr.)	OM 101B	OM 101B	1131	Financial Aid Director
Norton, Francis (Dr.)	CEC 103	CEC 103	1519	Cns.
Orndorff, C. Robert (Dr.)	OM 301B	OM 301B	1308	V.P. Student Affairs
Osgood-Sojourner Dorothy (Ms.)	HH 220	HH 212	1267	Social Work
Peck. David (Dr.)	FOB 120	FOB 115	1744	Sociology
Pelow, Randall (Dr.)	HH 307	HH 324	1780	Elementary Ed.
Reber, Vera (Dr.)	DHC 227	DHC 223	1736	History/Honors Prog.
Revelt, Joseph (Mr.)	OM 306	OM 306	1154	Institutional Research
Rogers, William (Dr.)	FSC 144	FSC 142	1401/3244	Biology
Ruff, Joseph (Dr.)	DHC 013	DHC 121	1506	English
Ruth, Richard (Mr.)	FSC 309	FSC 215	1234	Math/Computer Science

Ruth, Richard (Dr.)	FSC 215C	FSC 215	1431/3098	Math/Computer Science
Schultz, Marian (Ms.)	HH 105	HH 105	1395/3076	Ass't Dean/Und. Majors
Shepherd, Roosevelt (Mr.)	HH 207	HH 207	1558	Criminal Justice
Snow, George (Dr.)	DHC 217	DHC 223	1261	History
St. Clair, James (Dr.)	DHC 323	SHC 323	1732	Speech/Theatre Arts
Stafford, Gerald (Dr.)	HH 304	HH324	1357	Elementary Ed.
Stewart, Mary (Ms.)	DHC 319	DHC 121	1176	English
Strine, George (Dr.)	HH 302	HH 324	1248	Elem. Ed./Reading
Stumbaugh, John (Mr.)	DHC 303	DHC 223	1734	History
Urbanowicz, Mary Jane (Dr.)	HH 326	HH 324	1168	Elem. Education
Warkentin, Henry (Dr.)	SNH 117	SNH 131	1559	German
Waters, Lois (Dr.)	OM109	OM 109	1161	Dir./Social Equity
West, Joan (Ms.)	McLean Base.	McLean Base.	1420/3129	Asst. Dir/LAC
Willoughby-Herb, Sara (Dr.)	RH 104	HH 324	1787	Elem. Education
Winter, Robert (Dr.)	FSC 123	FSC 123	1570	Physics
Wright, Dennis (Dr.)	OM 202E	OM 202E	1151	Assoc. Dean/Arts & Sci.

CAREER EXPLORATION AND PLANNING SEMINAR FACILITATORS

FACILITATOR	OFFICE	BOX	TEL#	DEPARTMENT
Aberman, Hugh (Dr.)	GH 201	GH 201	1657	Chairperson/Psychology
Bradshaw, Mary (Mrs.)	Wright	Wright	1481	Ass't Prof./Psychological Counselor
Condon, Juanita (Ms.)	HH 106	HH 106	1329	Ass't Prof./Act 101 Counselor
Jones, Elnetta G. (Dr.)	HH 103	HH 103	1395	Dean, Div. Und. Maj.
Schultz, Marian (Ms.)	HH 105	HH 105	1395/3076	Ass't Dean, Div. Und. Maj.

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Notes

Division of

Undeclared Majors

Academic Calendar

1992-93

(dates subject to change)

Semester I	August 22	■	New freshmen arrive
	August 26	■	Day classes begin
	September 7	■	Labor Day
	November 24	■	Thanksgiving break
	November 30	■	Classes resume
	December 4	■	Classes end
	December 7-11	■	Final exams
	December 12	■	Commencement
Semester II	January 9	■	New freshmen arrive
	January 13	■	Day & evening classes begin
	March 6	■	Spring break
	March 15	■	Classes resume
	May 7	■	Classes end
	May 10-14	■	Final exams
	May 15	■	Commencement

Term III

May 24 Memorial Day-SU closed

May 25 Session Opens

May 29 Make-up day

June 4 Session ends

Term IV

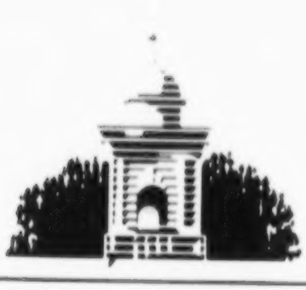
June 7 Session Opens

July 8 Session Ends

Term V

July 12 Session Opens

August 12 Session Ends



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